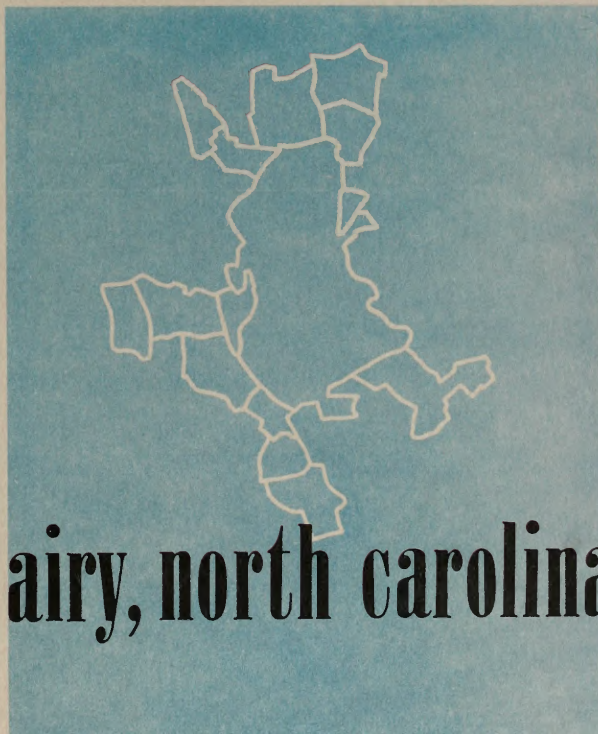


C4
11: M92/6
C.2

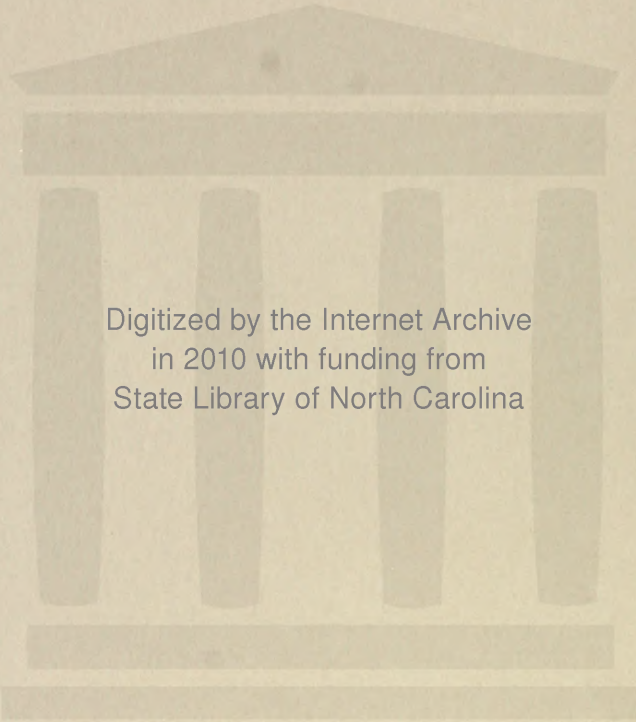
North Carolina State Library,
Raleigh

N. C.
Doc

ANNEXATION STUDY



mount airy, north carolina



Digitized by the Internet Archive
in 2010 with funding from
State Library of North Carolina

ANNEXATION STUDY

mount airy, north carolina

The preparation of this report was financially aided through a Federal grant from the Urban Renewal Administration of the Housing and Home Finance Agency, under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

TABLE OF CONTENTS

CHAPTERS	<u>Page</u>
I	INTRODUCTION
	Purpose 2
	Scope 3
	Past Growth 3
	Future Growth 4
II	GENERAL STATUTE REQUIREMENTS
	Declaration of Policy 6
	Prerequisites to Annexation 7
	Character of Area to be Annexed 8
	Procedure for Annexation 9
III	DELIMITATION AND ANALYSIS OF STUDY AREAS
	Study Area 1 15
	Study Area 2 16
	Study Area 3 17
	Study Area 4 18
	Study Area 5 19
	Study Area 6 20
	Study Area 7 21
	Study Area 8 22
	Study Area 9 23
	Study Area 10 24
	Study Area 11 25
	Study Area 12 26
	Study Area 13 27
	Study Area 14 28
IV	WHAT IT MEANS TO LIVE INSIDE OR OUTSIDE THE TOWN
	Level of Service Comparison - Mt. Airy and Fringe Areas
	Fire Protection 32
	Police Protection 33
	Water Supply 33
	Sewer Service 34
	Garbage Service 35
	Streets 35
	Cultural Services 36
	The Financial Impact of Annexation on Property Owners 36

V COST-REVENUE ANALYSIS

Revenues	
Real Property Tax	38
Personal Property Tax	39
Privilege Licenses	39
ABC Returns	39
Powell Bill Funds	40
Water and Sewer Charges	40
Returns from Property Owners	41
Costs	
Water and Sewer	41
Streets	42
Fire Protection	43
Police Protection	45
Garbage Service	45
Interest on Bonds	46
Analysis	50

VI CONCLUSIONS AND RECOMMENDATIONS

Priority Schedule	
First Stage (1963-1973)	54
Probable Net Effect of the First-Stage Annexations on the Town	59
Priority Schedule	
Second Stage (1973-1983)	60
Conclusion	65

APPENDIX

A	Housing Conditions and Existing Land Use Legend
B	Balance between Water and Sewer Revenues and Costs

TABLES		<u>Page</u>
I	Past Growth of Mt. Airy	4
II	Correspondence of Study Areas with Legal Requirements	12
III	Total Real Property Valuation and Average Residential Valuation per Study Area	29
IV	Characteristics of the Study Areas	30
V	Cost-Revenue Balance Sheet, Mt. Airy, N. C.	47
VI	Total Amount of Assessable Improvements and Rough Average Assessment per Developed Property	51
VII	Balance Sheet - Annual Revenues and Costs, Mt. Airy, N. C.	53
VIII	Summary of Needed Bond Issues	66

MAPS		<u>Precedes Page</u>
1	Annexation History	6
2	Study Areas	13
3	Study Area 1	15
4	Study Area 2	16
5	Study Area 3	17
6	Study Area 4	18
7	Study Area 5	19
8	Study Area 6	20
9	Study Area 7	21
10	Study Area 8	22
11	Study Area 9	23
12	Study Area 10	24
13	Study Area 11	25
14	Study Area 12	26
15	Study Area 13	27
16	Study Area 14	28
17	Water System and Fire Districts	33
18	Sewer System	35
19	Annexation Priorities	55

MT. AIRY ANNEXATION STUDY

CHAPTER I

INTRODUCTION

Annexation, it has been said, is the process of "extending the city limits to the limits of the city". Prior to the advent of the automobile, it was common for cities to include within their corporate boundaries the bulk of related urban development. Limited means of transportation encouraged a rather compact development pattern. The automobile changed all of this by encouraging development to string out along the arteries leading out of town. In time, some of the space between the developments which fronted on these arteries was also converted to urban use. The resulting pattern is one of extreme scatteration. Cities have been reluctant to extend urban-type services, such as water and sewer, to these spottily-developed areas. They have been even more reluctant to annex them.

With the foregoing historical hindsight as a background, let us ask the question "Why should a city wish to annex territory?" The main reason is that cities and towns are set up especially to provide urban-type services to densely built-up areas. This is why cities and towns were incorporated in the first place. This is why they must grow. Typical of the services which densely built-up areas must have are public water and sewerage systems, frequent garbage collection and street cleaning, superior fire and police protection, street lights and, in some places, sidewalks. Rural and semi-rural areas can get along without such elaborate facilities. The public health, safety and welfare are not ordinarily impaired, for instance, by septic tanks located on half-acre lots. However, many of the fringe areas of Mt. Airy contain residential areas where the density of housing is higher than it is in parts of the Town. The whole question of where urban-type or rural-type facilities and services are appropriate depends on population density. In other words, the more people that are crowded together within a small space the more opportunities there are for friction of one sort or another. There are also more opportunities for epidemics, fires and other hazards to transpire. Whereas cities are designed to prevent these problems (and to supply other services to which town-dwellers have become accustomed), counties provide services which are essentially county-wide in their application.

To further answer the question "Why should a city wish to annex territory" it should be pointed out that there are three major criteria for annexation: (1) legal, (2) financial, and (3) "intangible". The legal criteria answer the question of whether the area proposed for annexation meets the statutory requirements laid down

in General Statutes 169, Article 36, Part 3. Chapter II of this study will explain these criteria. The financial criteria answer the question "Can the city afford to annex the area?" This question, which has many ramifications, will be explored in Chapter V. The so-called "intangible" factors are those which cannot be weighed in terms of percentages and dollars. A few words about these are in order at this point.

Among the "intangible" or unmeasurable criteria favoring annexation might be listed:

- (1) a city's eagerness to make a better showing in the next decennial census
- (2) a city's need for more population in order to qualify for more state-shared funds
- (3) a city's need for more property valuation in order to raise its bond limit
- (4) a city's need to make sure that sufficient good industrial land is available for development.

It is strange but true that a city's vitality is more often judged by its in-city population growth than by the growth of its entire urban area, while at the same time its attractiveness as a place to visit or live is judged as much by its out-skirts as by its central area. Very little more will be said about these unmeasurable reasons for annexation in this study, but they should surely be kept in mind by the reader. They might, in some cases, override the financial factor.

PURPOSE

It will be the purpose of this study to investigate the feasibility for the Town of Mt. Airy to annex various contiguous fringe areas which are now, or will soon be, developed mainly for urban use. Urban uses include residential, commercial, industrial and institutional. Emphasis will be on the financial aspects of annexation, although some preliminary observations will be made concerning the legal aspects of the problem. It is important that the reader realize that this study is NOT the same as the report which is called for in General Statutes 160, Article 36, Part 3. That report cannot be compiled until a municipality has already decided what areas it is going to annex and when. It further involves legal descriptions of boundaries, plans for the letting of contracts, and other specifics.

The present study is a comprehensive framework for later, more specific reports in that it surveys the fringe areas around Mt. Airy with an eye toward deciding which territories the Town should make plans to annex. The aim of this study is to set forth a sensible annexation policy for the Town of Mt. Airy which it can follow for many years to come. It will also set forth priorities for the more immediate annexation projects. These priorities will be tied in with the Town's recently approved Public Improvements Program for the years 1963-68. No bonding recommendations have been made for annexations which are likely to come after 1973. This would be presuming too much. Such recommendations should be made in connection with a follow-up study that should be made in about 1973. This recommended follow-up study could assess the changes that have occurred in the remaining unannexed areas over the ten-year period as well as the Town's financial position at that time. All spatial measurements should be retaken for purposes of this follow-up study -- just as they should be for the detailed reports which must be prepared in connection with specific annexation ordinances. This retaking of spatial measurements, recomputation of populations, etc., is especially necessary where combinations of areas, in whole or in part, are proposed for annexation.

SCOPE

The scope of this study can, in part, be ascertained from Map 2. It was impossible to study all of the built-up areas which surround Mt. Airy. Only those areas were chosen for study which seemed, by visual inspection, to be reasonably close to the existing town limits and which might conceivably meet the legal requirements set forth in Chapter II. In some cases, topography or subsoil conditions have dictated that a certain area be excluded from consideration. Other areas, like the property between Areas 12 and 13, and the Proctor-Silex site, were not studied because it was felt that they would probably come into the Town by petition.

The time dimension of the study is foreshortened by the fact that given areas can change markedly in a decade. The present study views the various fringe areas from a 1963 vantage point -- hence the need for the follow-up study referred to above.

PAST GROWTH

The following table shows how the population of Mt. Airy and its environs has grown over the past forty years.

TABLE I

PAST GROWTH OF MT. AIRY, N. C.

Year	Town Population	Population of Township Outside of Town	Total Township Population
1960	7,055	13,649	20,704
1950	7,192	12,191	19,383
1940	6,286	9,983	16,269
1930	6,045	9,400	15,445
1920	4,752	5,595	10,347
1910	3,844	4,551	8,395

Source: United States Census Bureau

It can readily be seen that the gap between the Town's population and that of its urbanizing fringe area is widening. This means that the Town has not extended its limits in keeping with surrounding development. Of course, it would be impossible and impractical for the Town to annex the whole township. The question then is "How much and which parts of the urbanizing fringe should the Town annex?" This is the question which this study attempts to answer -- along with the question of when to take action. This latter question must be answered in terms of what areas need urban-type services the most and which of these areas can be annexed without endangering the Town's fiscal well-being.

Map 1 illustrates the growth of Mt. Airy in terms of area. From 1885, when the Town was incorporated, until 1950 there was essentially no change in the town limits. However, on January 1, 1950, a large area on the north side of Town was added. In 1959 a small industrial area on the west side of Town was annexed and in 1962 two small areas (the new Quality Mills tract and the public housing site) were annexed. The total area of Mt. Airy is now about 2.5 square miles. Urban-type development is, however, sprawled over an area aggregating about 20 square miles. The overall economic development of the Mt. Airy urban area will surely suffer if the Town does not exercise the required leadership to inaugurate a forward-looking program of annexation.

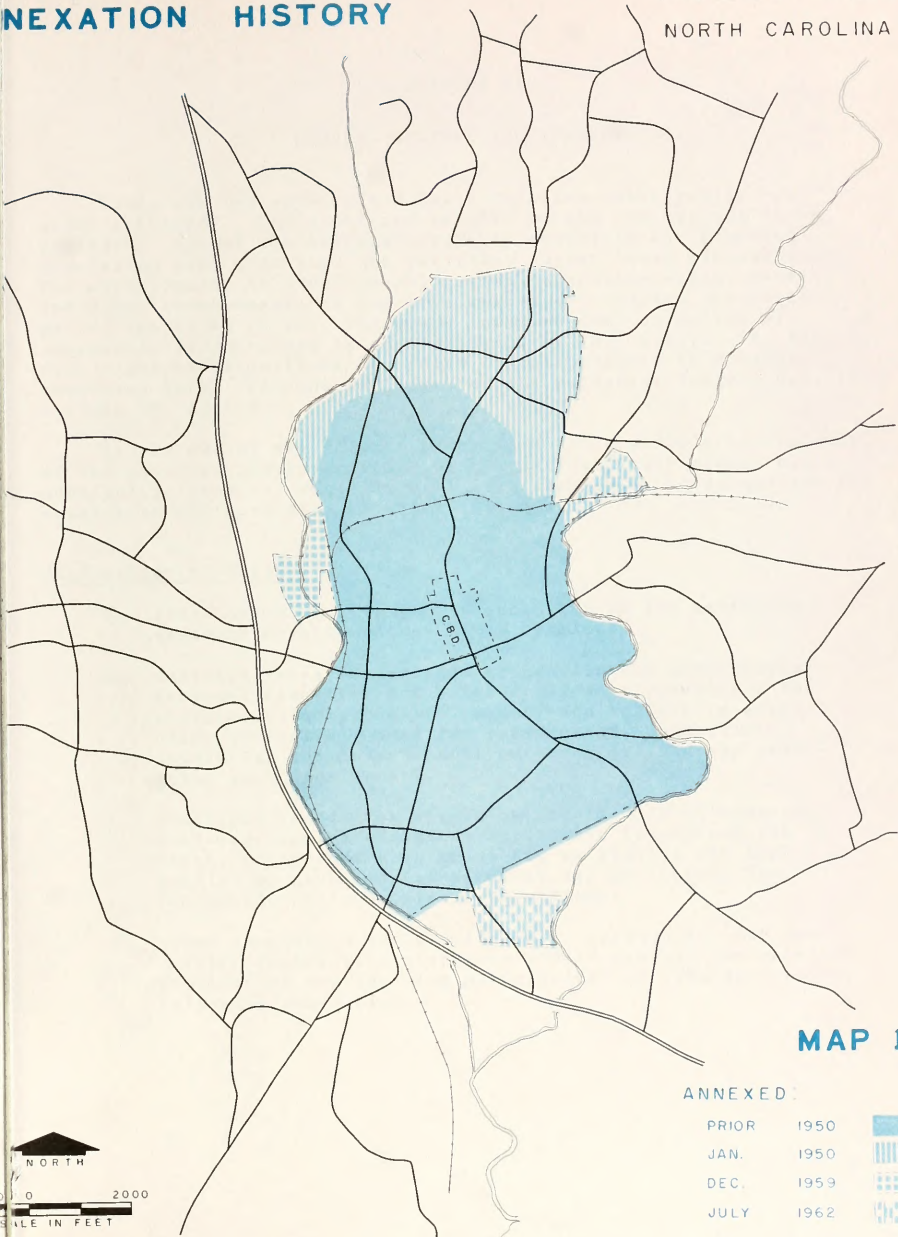
FUTURE GROWTH

The Population and Economy Report which has been prepared for Mt. Airy does not paint a very encouraging picture where population growth is concerned. For the Mt. Airy Planning Area (with a 1960 population estimated at 16,542) the report estimated a population of 17,265 in 1970 and 17,880 in 1980. These projections are based

on past trends; they assume uniformity in the future on the basis of past performance. The projections are so modest as to discourage the computation of probable future population densities in specific areas. It is estimated that there is room (considering topography, access and likely zoning) for a total of at least 800 more dwelling units in the 14 study areas. However, using the Mt. Airy ratio of persons per dwelling unit (3.2) only 226 more dwelling units will be required within the entire Planning Area by 1970 - plus another 192 by 1980. It was deemed impossible to estimate where these homes would be built within the total urban area. For instance, it is likely that many of the 418 new homes will be located in Flat Rock, Salem, and other areas that are beyond the 14 study areas. The new public housing project, with its 110 units, will surely absorb some of the increased population -- although many of its tenants will be relocatees from other in-town areas. Hence, all cost and revenue figures are based on 1963 population estimates and installations.

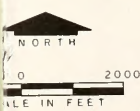
ANNEXATION HISTORY

MOUNT AIRY
NORTH CAROLINA



MAP 1

ANNEXED:		
PRIOR	1950	
JAN.	1950	
DEC.	1959	
JULY	1962	



CHAPTER II

GENERAL STATUTE REQUIREMENTS

There are two ways that a North Carolina municipality can annex territory. The older and simpler of the two methods is by petition. All of the affected property owners in the proposed annexation area must sign the petition. Under these circumstances the municipality is under no obligation to provide water, sewers, and other improvements to the area unless, of course, the municipality agrees to do so. The newer and more complex method of annexation is contained in General Statutes 160, Article 36, Part 3. Such requirements will be set forth in this chapter in a rather condensed form. For the full text of the pertinent law see G.S. 160, Article 36, Part 3.

At the end of the chapter there is a table which presents some of the physical characteristics of the various study areas, e.g., contiguity, density, etc. It will also show which areas qualify for annexation and according to which criteria.

Declaration of Policy

1. Sound urban development is essential to the continued economic development of North Carolina.
2. Municipalities are created to provide the governmental services essential for sound urban development and for the protection of health, safety and welfare in areas being intensively used for residential, commercial, industrial and governmental purposes or in areas undergoing such development.
3. Municipal boundaries should be extended in accordance with legislative standards applicable throughout the State, to include such areas and to provide the high quality of governmental services needed therein for the public health, safety and welfare.
4. Areas annexed to municipalities in accordance with such uniform legislative standards should receive the services provided by the annexing municipality as soon as possible following annexation.

Prerequisites to Annexation

The municipality initiating annexation shall make plans for the extension of services into the area proposed to be annexed and shall, prior to the public hearing described below, prepare a report containing:

1. Maps of the municipality and adjacent territory to show the following information:
 - A. The present and proposed boundaries of the municipality.
 - B. The present major trunk water mains and sewer interceptors and outfalls, and the proposed extensions of such mains and outfalls.
 - C. The general land use pattern in the area to be annexed.
2. A statement showing that the area to be annexed meets the requirements listed under the heading Character of Area to be Annexed.
3. Statements describing the plans of the municipality for extending to the area to be annexed each major municipal service performed within the municipality at the time of annexation. Specifically, such plans shall:
 - A. Provide for extending police protection, fire protection and street maintenance services to the area to be annexed on the date of annexation on substantially the same basis and in the same manner as such services are provided within the rest of the municipality prior to annexation. If a water distribution system is not available in the area to be annexed, the plans must call for reasonably effective fire protection services until such time as water lines are made available in such areas under existing municipal policies for the extension of water lines.
 - B. Provide for extension of major trunk water mains and sewer outfall lines into the area to be annexed so that when such lines are constructed, property owners in the area to

be annexed will be able to secure public water and sewer service according to the policies in effect in such municipality for extending water and sewer lines to individual lots or subdivisions.

- C. If extension of major trunk water mains and sewer outfall lines into the area to be annexed is necessary, set forth a proposed timetable for construction of such mains and outfalls as soon as possible following the effective date of annexation. In any event, the plans shall call for contracts to be let and construction to begin within twelve months following the effective date of annexation.
- D. Set forth the method under which the municipality plans to finance extension of services into the area to be annexed.

Character of Area to be Annexed

A municipal governing body may extend the municipal corporate limits to include any area which meets the following standards:

- 1. The total area to be annexed must meet these standards:
 - A. It must be adjacent or contiguous to the municipality's boundaries at the time of the annexation proceeding is begun.
 - B. At least one-eighth of the aggregate external boundaries of the area must coincide with the municipal boundary.
 - C. No part of the area shall be included within the boundary of another incorporated municipality.
- 2. Part of all of the area to be annexed must be developed for urban purposes. An area developed for urban purposes is defined as any area which meets any one of the following standards:
 - A. Has a total resident population equal to at least two persons for each acre of land included within its boundaries; or,
 - B. Has a total resident population equal to at least one person for each acre of land included within its boundaries, and is subdivided into

lots and tracts such that at least 60% of the total acreage consists of lots and tracts five acres or less in size and such that at least 60% of the total number of lots and tracts are one acre or less in size; or,

- C. Is so developed that at least 60% of the total number of lots and tracts in the area at the time of annexation are used for residential, commercial, industrial, institutional, or governmental purposes, and is subdivided into lots and tracts such that at least 60% of the total acreage, not counting the acreage used at the time of annexation for commercial, industrial, governmental or institutional purposes, consists of lots and tracts five acres or less in size.
3. In fixing new municipal boundaries, a municipal governing board shall, wherever practical, use natural topographic features such as ridge lines, and streams and creeks, as boundaries, and if a street is used as a boundary, include within the municipality land on both sides of the street and such outside boundary may not extend more than 200 feet beyond the right-of-way of the street.

Procedure for Annexation

1. Notice of Intent - Any municipal governing board desiring to annex territory under the provisions of this part shall first pass a resolution stating the intent of the municipality to consider annexation. Such resolution shall describe the boundaries of the area under consideration and fix a date for a public hearing on the question of annexation, the date for such public hearing to be not less than thirty days and not more than sixty days following passage of the resolution.
2. Notice of Public Hearing - the notice of public hearing shall:
 - A. Fix the date, hour and place of the public hearing.
 - B. Describe clearly the boundaries of the area under consideration.
 - C. State that the report containing the information called for under the heading Character of Area to be Annexed will be available at the office

of the municipal clerk at least fourteen days prior to the date of public hearing.

- D. Be given by publication in a newspaper having general circulation in the municipality once a week for at least four successive weeks prior to the date of the public hearing.

3. Passage of Annexation Ordinance - The municipal governing board shall take into consideration facts presented at the public hearing and shall have authority to amend the report mentioned above and to make changes in the plans for servicing the areas proposed to be annexed so long as such changes meet the requirements listed under the heading Character of Area to be Annexed. The municipal governing board shall have authority to adopt an ordinance no sooner than the seventh day nor later than the sixtieth day following the public hearing, extending the corporate limits of the municipality to include all, or such part, of the area described in the notice of public hearing which meets the requirements of the section Character of Area to be Annexed and which the governing board has concluded should be annexed.

The ordinance shall:

- (1) Contain specific findings showing that the area to be annexed meets the requirements listed under the heading Character of Area to be Annexed. The external boundaries of the area to be annexed shall be described by metes and bounds.
- (2) A statement of the intent of the municipality to provide services to the area being annexed as set forth in the required report.
- (3) A specific finding that on the effective date of annexation the municipality will have funds appropriated in sufficient amount to finance construction of any major trunk water mains and sewer outfalls found necessary in the required report to extend the basic water and/or sewer system of the municipality into the area to be annexed, or that on the effective date of annexation the municipality will have authority to issue bonds in an amount sufficient to finance such construction. If authority to issue such bonds must be secured from the

electorate of the municipality prior to the effective date of annexation, the effective date of annexation shall be no earlier than the day following the statement of the successful result of the bond election.

(4) Fix the effective date of annexation. The effective date of annexation may be fixed for any date within twelve months from the date of passage of the ordinance.

4. Effect of Annexation Proceedings - From and after the effective date of the annexation ordinance, the territory and its citizens and property shall be subject to all debts, laws, ordinances and regulations in force in such municipality and shall be entitled to the same privileges and benefits as other parts of such municipality. The newly annexed territory shall be subject to municipal taxes levied for the fiscal year following the effective date of annexation.
5. Simultaneous Annexation Proceedings - If a municipality is considering the annexation of two or more areas which are all adjacent to the municipal boundary but are not adjacent to one another, it may undertake simultaneous proceedings under authority of this part for the annexation of such areas.
6. Remedies for Failure to Provide Services - If, not earlier than one year from the effective date of annexation, and not later than fifteen months from the effective date of annexation, any person owning property in the annexed territory shall believe the municipality has not followed through on its service plans adopted under provisions of this part, such person may apply for a writ of mandamus under the provisions of Article 40, Chapter 1 of the General Statutes. Relief may be granted by the judge of Superior Court if it can be proved that the level of services offered within the newly annexed area has not been raised to that of the annexing municipality or if contracts have not been let within the required period.

TABLE II CORRESPONDENCE OF STUDY AREAS WITH LEGAL REQUIREMENTS

Study Area	(1)		(2)		(3)		How They Qualify
	Percent of Contiguity	Persons per Acre	Percent of Total Acreage in Lots & Tracts 5 Acres or Less in Size	Percent of Total Number of Lots & Tracts 1 Acre or Less in Size	Percent of Total Number of Lots & Tracts in Urban Use	Percent of Total Residential and Undeveloped Acreage in Lots & Tracts 5 Acres or Less in Size	
1	17.92	0.10	1.84	10.00	20.00	1.84	N.Q.
2	19.73	5.24	94.12	93.06	84.73	94.12	(1,2,3)
3	23.95	0.24	55.22	46.67	93.34*	71.29**	(3)
4	25.10	2.22	77.85	79.48	84.11	81.30	(1,2,3)
5	26.00	3.47	93.98	90.91	83.53	100.00	(1,2,3)
6	14.17	2.72	80.21	86.49	80.64	94.96	(1,2,3)
7	31.32	1.45	56.20	80.00	70.00	64.78	(3)
8	15.61	2.70	89.17	78.41	73.87	89.17	(1,2,3)
9	17.14	1.73	45.89	79.69	81.25	100.00	(3)
10	20.33	1.64	61.97	80.77	48.72	85.55	(2)
11	39.23	1.86	83.52	77.10	53.00	89.12	(2)
12	39.05	2.05	65.29	77.95	61.71	65.29	(1,2,3)
13	62.93	4.59	100.00	85.49	83.88	100.00	(1,2,3)
14	13.91	2.77	82.83	84.04	63.01	86.69	(1,2,3)

* With shopping center - 100%

** With shopping center - 93.23%



MAP 2

STUDY AREA BOUNDARY —

CHAPTER III

DELIMITATION AND ANALYSIS OF STUDY AREAS

This chapter will describe in words and figures the boundaries and characteristics of the 14 areas which have been selected for study purposes. These 14 study areas were delimited on the basis of criteria such as (1) community identification, (2) workable size, (3) natural barriers, (4) drainage features, (5) land use patterns, and (6) density of population. Where possible, homogeneous communities with a name and a sense of exclusiveness were left intact. This was not possible, however, with regard to Toast which, because of its size and topography, was broken down into three study areas. Wherever possible, creeks and other water courses, hills and ridge lines were utilized as boundaries. In other cases, major streets such as the Highway 52 Bypass were used. Even some relatively minor streets were used as boundaries where there was little development beyond them. Lot lines were used in many cases. However, whenever it was considered impractical to include an extra large tract in its entirety within a study area, or whenever lot lines were very irregular, liberty was taken to bring a boundary line across a lot or lots without reference to any surveyed line.

In view of the fact that these study areas are not necessarily the precise areas which the Town of Mt. Airy might someday annex, a little flexibility in boundaries is perhaps forgivable. The areas were chosen for purposes of data collection and fiscal analysis. The Town Board may decide to combine various of the study areas; or perhaps it will take only parts of certain areas into the Town. Prior to any specific annexation action, the area proposed for annexation will have to be re-studied in order to verify its conformance with the legal requirements which were set forth in Chapter II. This may necessitate some boundary changes, but these changes should not affect very greatly the financial findings made on similar areas in this plan.

The order of treatment of each of the 14 study areas is as follows:

- (1) Name and orientation of the area
- (2) Boundaries (roughly described)
- (3) Topography and drainage pattern
- (4) Total acreage and percent developed for urban uses (including street conditions)
- (5) Predominant land use; other uses
- (6) Number and types of dwelling units; estimated present population
- (7) Estimated saturation population and likelihood of growth

- (8) Number and percent of substandard dwelling units; racial pattern
- (9) Number and types of non-residential uses; blighting effects

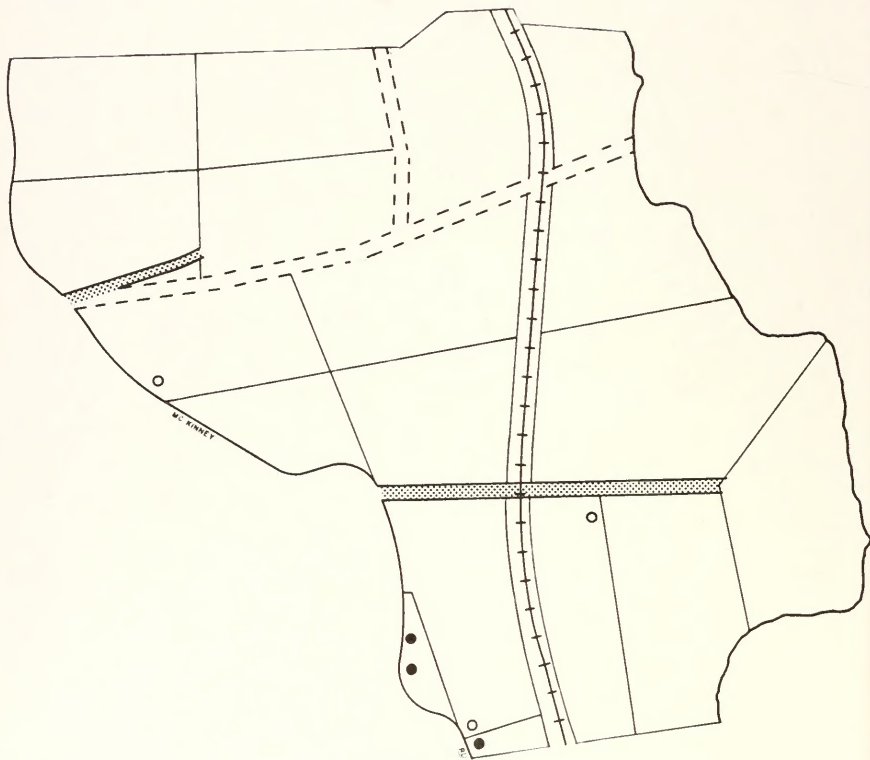
A few methods and principles must be articulated at this point. The present population of the various areas was estimated by multiplying the number of dwelling units in each area by 3.2. This 3.2 factor represents the number of persons per household as reported by the 1960 U. S. Census for Mt. Airy proper. The Mt. Airy figure was used in preference to the Surry County figure of 3.6 because it was felt that the fringe areas under study are predominantly urban in their social characteristics.

The so-called "saturation" population was computed by examining closely the vacant areas within each study area to determine whether they were buildable and, if so, to what density. Floodability and gradient were evaluated -- along with accessibility and the likely zoning of the area. (In most cases, the anticipated zoning approximated that of the nearest residential area now inside the Town). No more than four dwelling units per net residential acre (i.e., not counting streets and other public property) were allowed in any fringe area. Furthermore, no good commercial land nor land sandwiched between commercial or industrial uses was counted.

At the end of this chapter is a table which gives the total real property valuation and average residential valuation for each study area. This will give the reader a quick, though superficial, gauge whereby to judge the quality of the respective areas. There is also a summary table which permits a comparison between study areas of the various acreage, mileage and percentage figures which are sprinkled throughout the rest of this chapter. This summary table will emphasize exact figures whereas the text will describe the study areas largely in terms of round numbers.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
1



MAP 3

STUDY AREA 1

Area 1 constitutes the new Mt. Airy Industrial Park area. It is bounded by the Industrial Park's property lines on the north, by Lovill's Creek on the east, by the Industrial Park and another property line on the south, and by the centerline of Park Drive on the west. The area is quite hilly and is partially wooded. Drainage is towards Lovill's Creek.

Some 163 acres are included in Area 1 -- of which 32.32 acres, or about 20%, are developed. The developed acreage is used thusly:

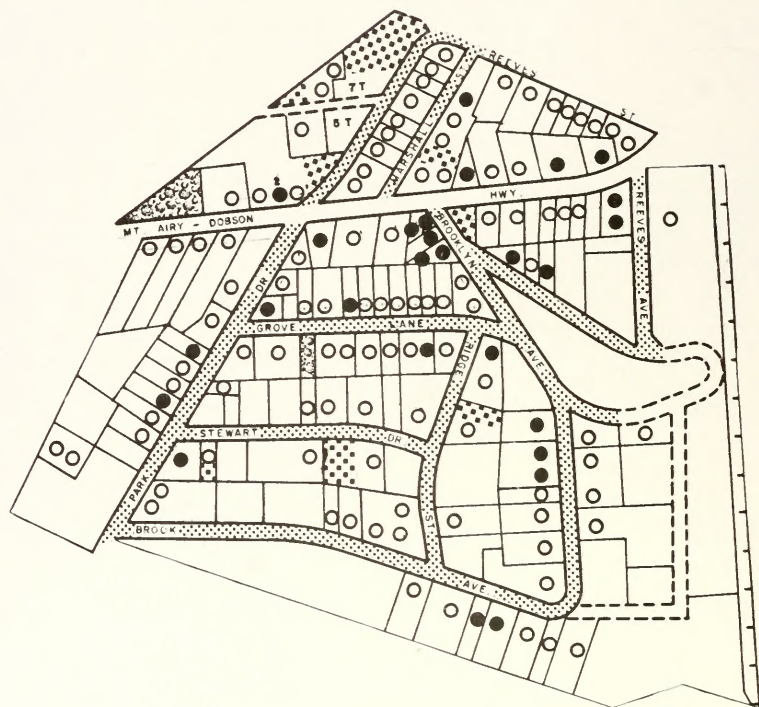
Industrial	44.86%
Railroad	24.13
Streets	22.12
Residential	8.89

Of the one mile of streets in the area, 77% are paved.

There are only five dwelling units in the area and two are in need of major repair. The present population of about 16 persons will probably be displaced by industrial development. There are presently no factories in the area although water and sewer lines are being extended from the Town to serve the two factories which are now planned for the Park. These two factories will occupy a total of 14.5 acres. This acreage was counted when computing percent of development.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
2



MAP 4

STUDY AREA 2

Area 2 goes by the name of "Highland Park". It is bounded by lot lines and Reeves Drive on the north, by the railroad tracks on the east, by the Industrial Park on the south, and by the rear lot lines of lots facing Park Drive as well as a segment of U. S. 601 on the west. The area is relatively flat although there are some ravines. The area drains into Lovill's Creek.

There are approximately 85 acres in Area 2. Of these, almost 52 acres, or 61%, are intensively developed. The developed acreage is used thusly:

Residential	58.75%
Streets	32.26
Commercial	4.21
Railroads	3.34
Semi-Public	1.44

There is no industrial activity in the area. Of the 2.3 miles of streets in the area, only 0.83 miles (36%) are paved.

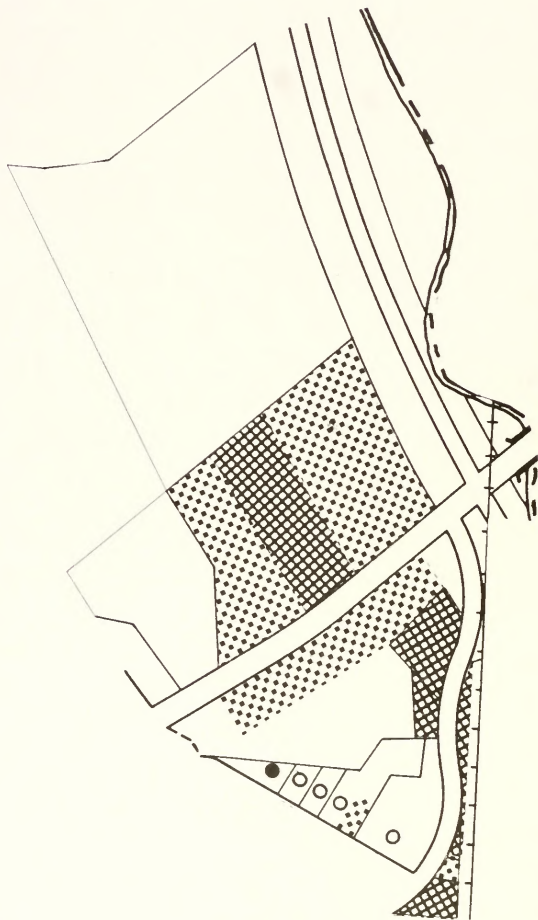
There are 139 dwelling units, including 12 mobile homes, in Area 2. It is estimated that some 445 persons live in the area. If every lot were built upon, Highland Park could accommodate 167 dwelling units and about 535 persons. However, it would not be desirable for the area to fill up to this degree without provision of public water and sewerage facilities. Some 21.5% of the dwelling units in the area (i.e., 30) need major repairs or outright clearance.

There are 8 business structures in the area. The presence of lumber yards, garages and other "heavy" commercial uses in the area has a blighting influence. There are also two small churches in the area.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA

3



MAP 5

STUDY AREA 3

This area might be called the "Highway 601-Shopping Center Area". It is oriented very strongly toward Mt. Airy. It is bounded by the rear lot lines of lots facing Welch Road on the north, by Lovill's Creek (the town limit line) and by the railroad tracks on the east, by Reeves Drive and property lines on the south, and by property lines connecting with an unsurveyed line (between the southwestern tip of the shopping center property and a point equidistant from the Bypass on the rear lot line of lots facing U. S. 601) on the west.

The area slopes upward quite markedly as one travels south on U. S. 601; however, the shopping center area is quite low and flat. Drainage of the area is into Lovill's Creek.

There are nearly 67 acres in Area 3. Thirty-three, or about 50% of the total acres, are now developed. Moreover, full development of the proposed shopping center will add another 14.65 acres to the developed acreage, making a total of nearly 48 developed acres, or 72% of the total acreage. The developed acreage is used thusly:

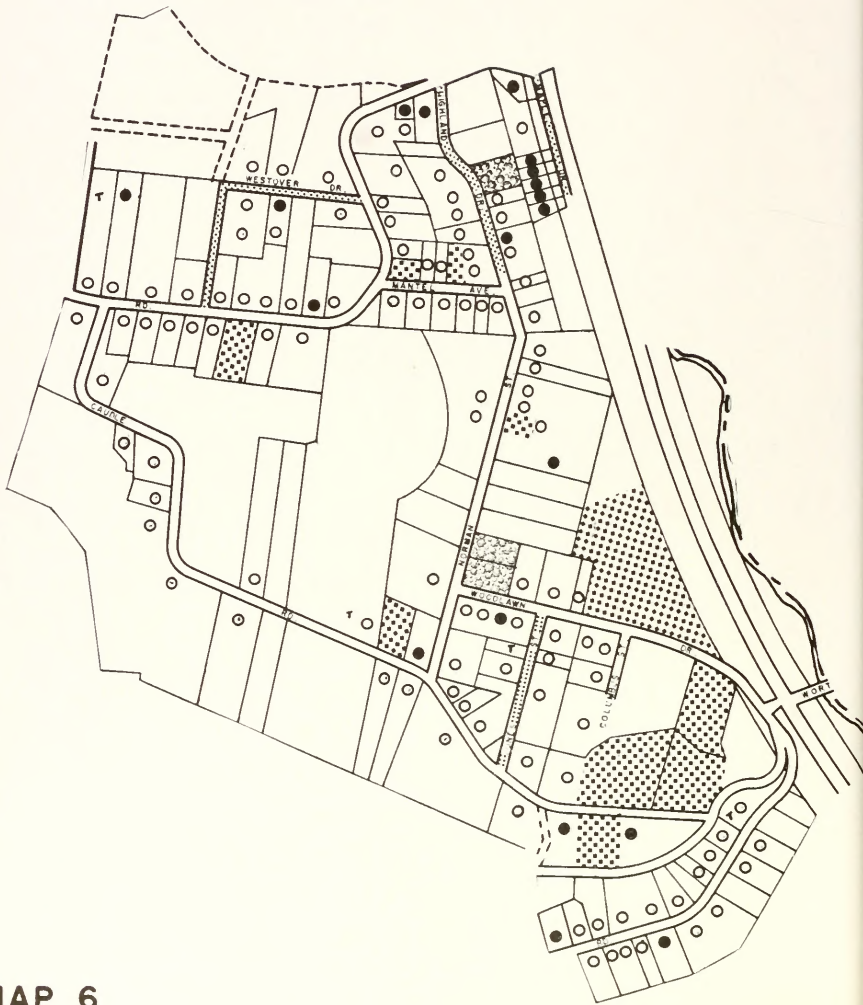
Commercial	47.89%
Streets	21.65
Industrial	18.32
Residential	7.81
Railroads	4.33

Of just under one mile of streets in the area, 84% are paved.

There are only five dwelling units in the area and not more than two additional ones could be built here. One of the five existing homes is in substandard condition. There are 14 business and industrial uses in Area 3, including some good-sized operations. All of those fronting on U. S. 601 are quite new and attractive. There are four oil bulk plants in the area. Therefore, in order for this area to be annexed, the town ordinance proscribing oil bulk plants from being within the town limits would have to be revoked.

**EXISTING LAND USE
AND
HOUSING CONDITIONS**

**STUDY AREA
4**



MAP 6

STUDY AREA 4

Area 4 is usually called "Franklin". It is bounded by a creek on the north, by the centerline of U. S. 52 Bypass and Lovill's Creek (the town limit line) on the east, by the rear lot lines of lots fronting Welch Road and Caudel Drive on the south, and by property lines on the west. The area is rather hilly with most of its roads following ridge lines. The area drains into Lovill's Creek.

There are approximately 183 acres in Area 4. Of this total, 94 acres, a little more than 50%, are developed for urban uses. The remainder is used largely for agricultural purposes. The developed acreage is used thusly:

Residential	62.88%
Streets	26.01
Commercial	10.20
Semi-Public	0.91

Of the area's 3.36 miles of streets, 2.9 miles (86.3%) are paved.

There are 127 dwelling units in Area 4. The present population is estimated to be 406 persons. With a possible 94 more homes, the ultimate population of the area could reach 700 persons. However, sanitary sewers would become necessary long before this degree of density were reached. Some 13.4% of the homes (i.e., 17) are now substandard.

There are nine businesses in the area, including a trucking terminal which is under construction. The area's three auto wrecking yards have a blighting influence on the area. Further non-residential invasion should be discouraged. There are also two churches in the area.

STUDY AREA 5

Area 5 is an integral part of Toast. It is bounded on the north by property lines, on the east by Franklin Road (which is also a ridge line), on the south by the rear lot lines of lots facing Long and Locklear Streets, on the west by the rear lot lines of lots facing Herring Street and West End Drive together with a line drawn between Old Toast Road and New Toast Road (N. C. 89). The terrain is "rolling" with drainage toward Stewart's Creek.

There are approximately 125 acres in Area 5. Nearly 90, or 72%, of these acres are developed for urban uses. The developed acreage is used thusly:

Residential	60.38%
Streets	25.24
Commercial	6.77
Industrial	4.67
Public and	
Semi-Public	2.94

Of the 3.12 miles of streets in the area, 1.42 miles (5.5%) are paved.

Some 135 dwelling units are found in Area 5, including seven mobile homes. This represents a population of about 432 persons. It is estimated that 63 more homes could be built in the area without crowding. If this were to happen, the "saturation" population would be 650. Only five of the homes now in the area are sub-standard.

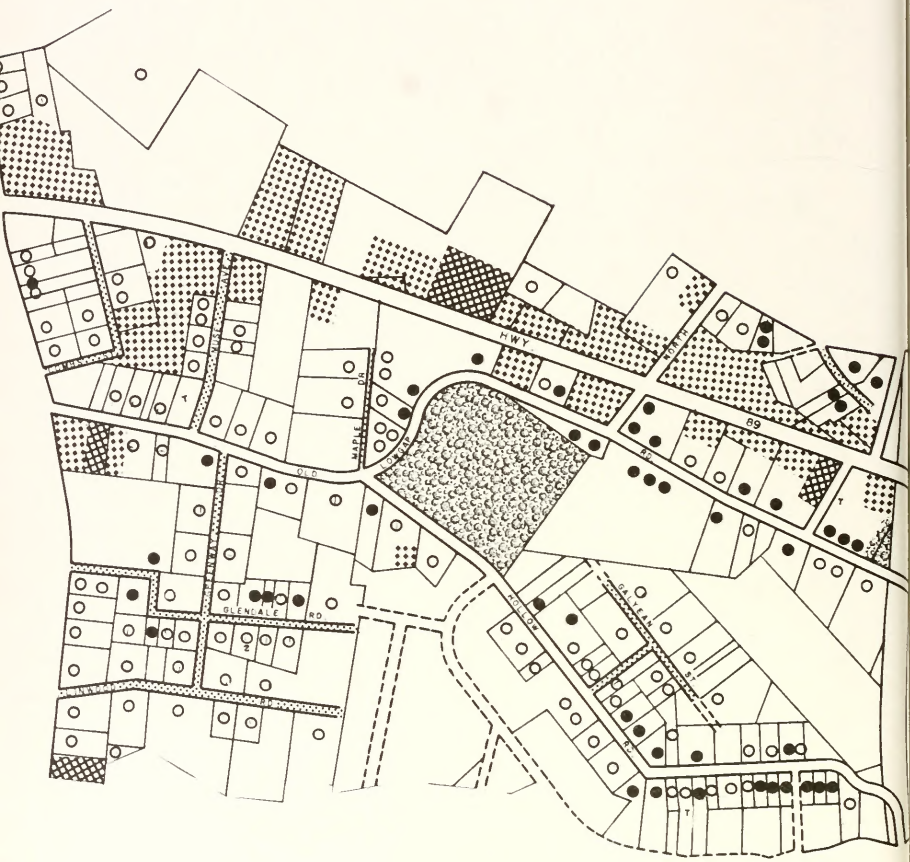
There are 22 businesses in the area as well as three industrial concerns and five public and semi-public uses. Some of the businesses are becoming run-down though none of them is now dilapidated. Two of the industrial uses are sawmills, the other is a monument works. Among the public and semi-public uses are the Toast Post Office, and Toast-Franklin Volunteer Fire Department, a community club and two churches.

HOUSING CONDITIONS



**EXISTING LAND USE
AND
HOUSING CONDITIONS**

**STUDY AREA
6**



MAP 8

STUDY AREA 6

This area embraces a large part of Toast. It is bound on the north partly by property lines and partly by Piper Gap Road, on the east by the centerline of U. S. 52 Bypass, on the south by a creek and a line extended due east from the southern right-of-way line of Rosewood Drive, and on the west by Franklin Road. The area is rolling and includes a small hill. Both N. C. 89 and Maple Drive are located on ridges. The whole area drains into Lovill's Creek.

There are approximately 188 acres in Area 5. About 120 acres are developed (68.55%). The developed acreage is used thusly:

Residential	48.42%
Streets	26.51
Commercial	14.51
Semi-Public	7.49
Industrial	3.07

Of the area's 4.35 miles of streets, 3.31 miles (76%) are paved.

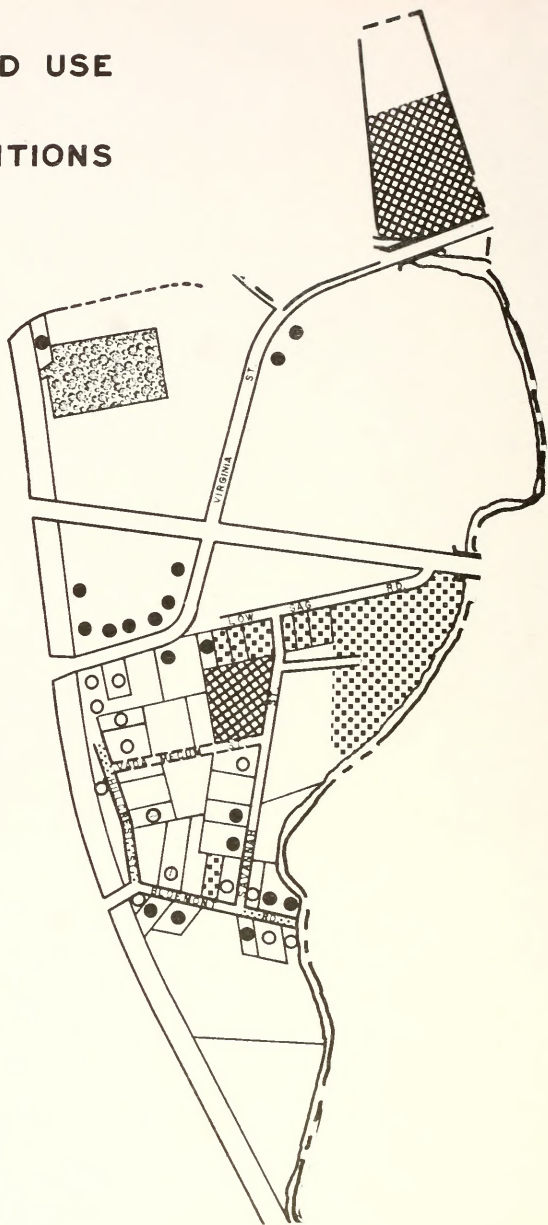
There are 160 dwelling units in Area 6, representing a population of about 512 persons. It is estimated that 51 more homes could be built in the area. If this were done, the total population of the area could reach 675 persons. However, to be this built-up, the area would have to have public water and sewer systems. Of the 160 dwelling units in Area 6, 52 (32.5%) are substandard.

There are 30 businesses in the area, three industries (two textile mills and a monument works) and two churches. One of the churches has an adjoining cemetery which accounts for the large amount of semi-public use. Most of the businesses are quite attractive. New commercial development is expected along N. C. 89.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
7

MAP 9



STUDY AREA 7

Area 7 seems to have no name. It is oriented very strongly toward the Town. It will be noted that the 1959 annexation adjoins this area. This area is bounded on the north by N. C. 1864 (a dirt road) and by the aforementioned 1959 annexation area, on the east and south by the present town limits, and on the west by the center-line of U. S. 52 Bypass. The area includes a couple of hills, but is, otherwise, quite low. In fact, much of it is flood plain. The area drains into Lovill's Creek.

There are approximately 80 acres in Area 7. About 36 acres (45.34%) are developed. The developed acreage is used thusly:

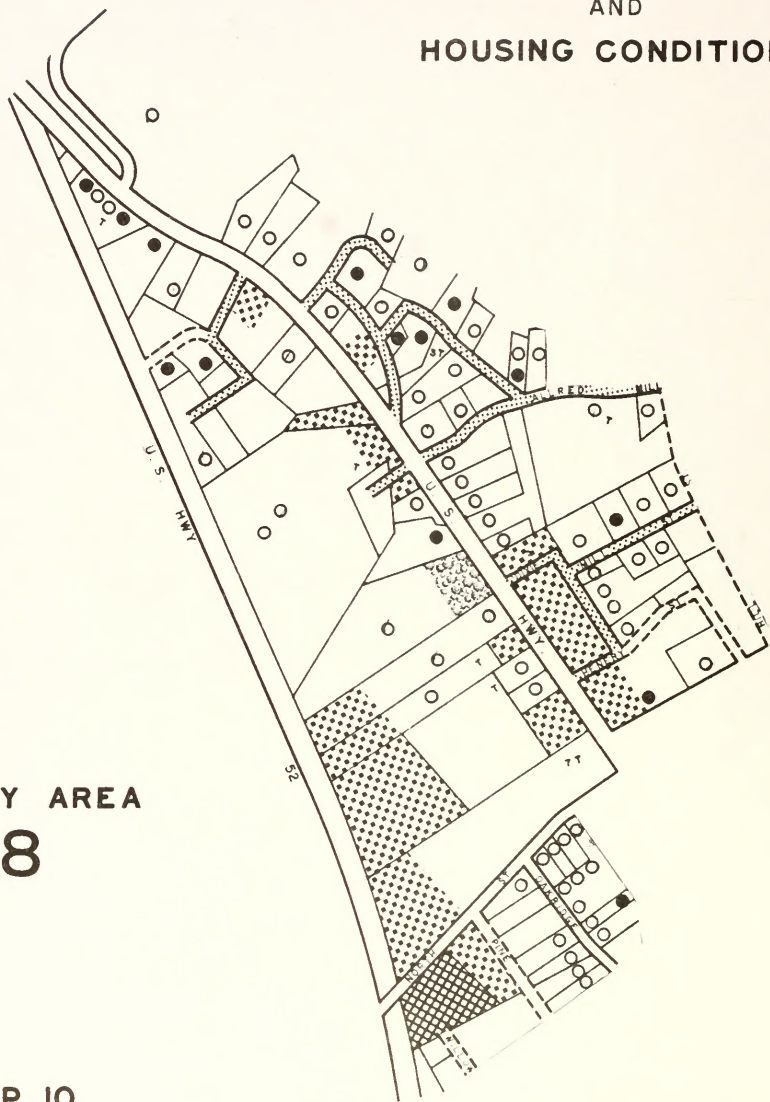
Streets	41.82%
Residential	30.38
Commercial	12.00
Industrial	10.24
Public	5.56

The unusually high percentage of the developed acreage which is devoted to streets indicates that the area is essentially a bridge between the Town and Toast. Of the 2.07 miles of streets, 1.83 miles (88.4%) are paved.

There are 36 dwelling units in Area 7 representing a population of about 155 persons. It is estimated that not more than six additional dwelling units could be built in the area without utilizing flood plains. However, it is more likely that the population of the area will decline since the area is not really desirable for residential purposes. Of the 36 dwelling units in Area 7, 19 (53%) are substandard.

The most prominent of the nine non-residential uses in the area are an oil bulk plant, the Chevrolet dealership, and a paper box factory. A new tobacco warehouse is being built within the area. The public use noted above is an abandoned cemetery.

EXISTING LAND USE AND HOUSING CONDITIONS



STUDY AREA

8

MAP 10

STUDY AREA 8

This area is part of what might be called "Short Town" or the "Lebanon Street Extension Area". It is bounded by N. C. 1704 on the north, by property lines and a line drawn parallel to and 200' from a dirt road as well as by Hill Street on the east, by Witt and North Streets and the rear lot lines of lots facing on Lebanon and Hickory Streets on the south, and by the centerline of U. S. 52 Bypass on the west. The area drains into Lovill's Creek.

There are approximately 100 acres in Area 8. Some 57 of these acres are developed for urban uses. The developed acreage is used thusly:

Residential	52.01%
Streets	25.84
Commercial	18.54
Industrial	2.01
Semi-Public	1.60

Of the 2.04 miles of streets in Area 8, 1.70 miles (83.34%) are paved.

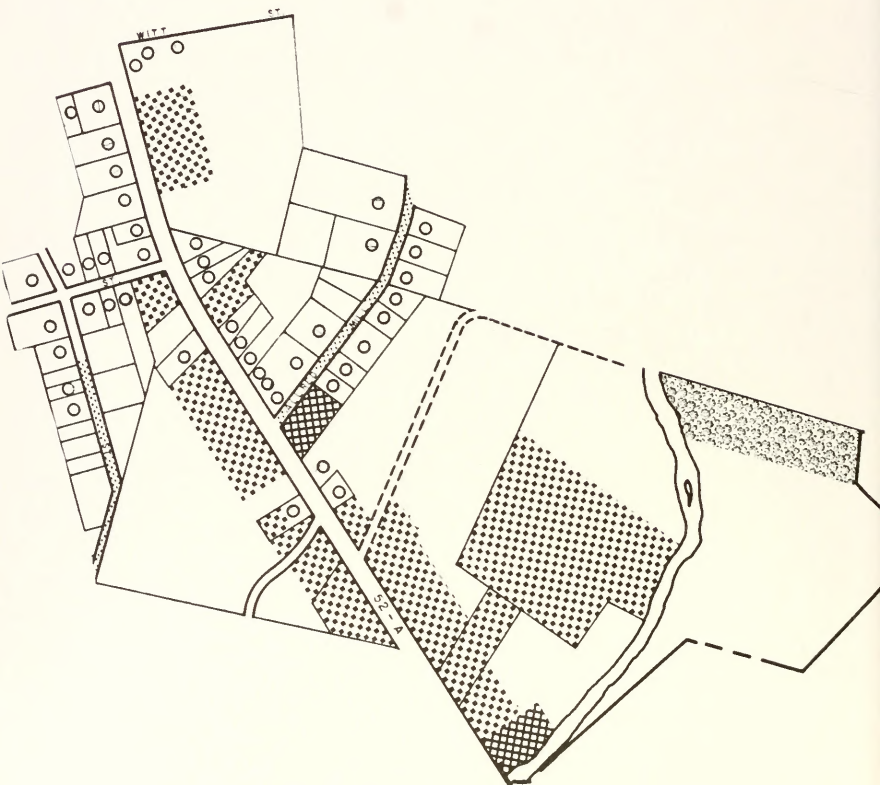
There are 85 dwelling units in Area 8, including 15 trailers, representing a population of about 272 persons. It is estimated that 24 additional dwelling units could be built in the area without aggravating health hazards or sacrificing any good highway frontage. Such development is unlikely, but if these 24 additional dwelling units materialized, the area's population would be 350. Of the 85 dwelling units in the area, 15 (18%) are substandard.

There are 17 non-residential uses in Area 8. Most of the prominent non-residential establishments in the area are on or near U. S. 52 Bypass. They include a new motel and restaurant, a new service station, and produce and plant company. There are also two motor freight terminals, a vending company and a construction office and warehouse. There is one church in the area.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA

9



MAP II

STUDY AREA 9

Area 9 is a closer-in part of "Short Town" or what we have called the "Lebanon Street Extension Area". It is bounded by Witt and North Streets and the rear lot lines of lots facing Lebanon and Hickory Streets on the north, by property lines and the Country Club on the east, by the present town limits on the south, and by a portion of Lebanon Street, the Veteran's Park, the rear lot lines of lots fronting Oak Ridge Street and Lebanon Street on the west.

The area is quite flat -- although there is one hill within its bounds. The land along Lovill's Creek is subject to flooding. The whole area drains into Lovill's Creek.

There are approximately 83 acres in Area 9. Some 52 (64%) of these acres are developed for urban uses. The developed acreage is used thusly:

Commercial	42.42%
Residential	30.61
Streets	17.56
Public	5.76
Industrial	3.65

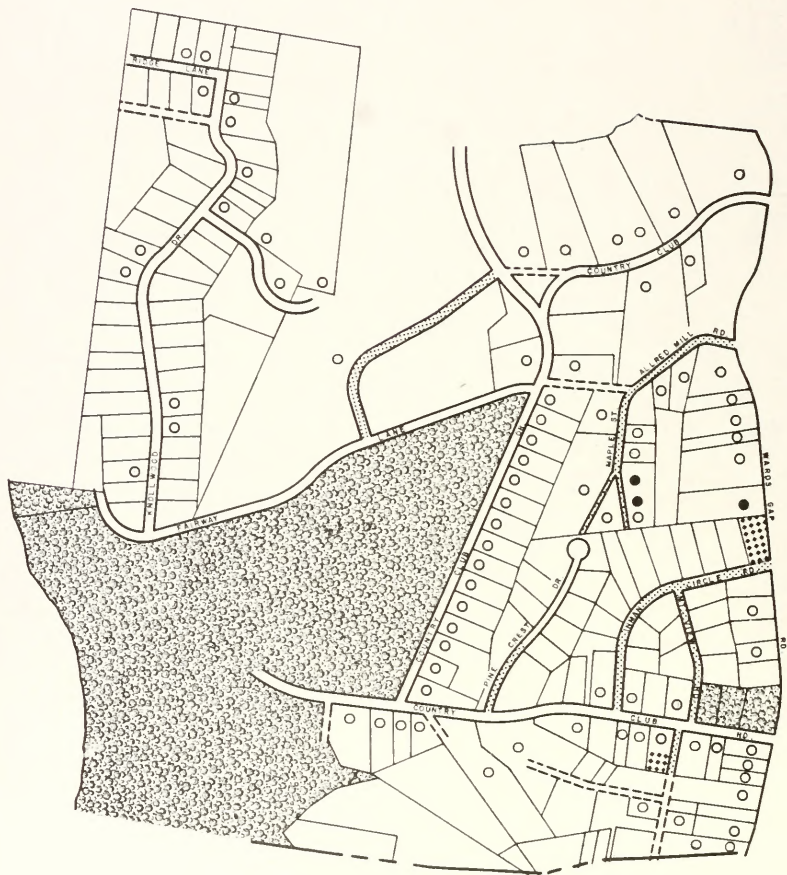
Of the 1.26 miles of streets in Area 9, 0.87 miles (69%) are paved.

There are 44 dwelling units in Area 9, representing a population of about 140 persons. It is estimated that 15 additional dwelling units could be built in Area 9, but this type of development is not likely because of the area's predominantly commercial aspect. Of the 44 dwelling units now in the area, four (9%) are substandard.

There are 20 non-residential uses in Area 9. The most prominent of these are a funeral home, a new bowling alley, a dairy, three cafes, a drive-in theater, a truck dealership, an auto body works, a concrete pipe plant, a monument works, a floor coverings store, and a super market. Most of the establishments are quite new. There are also two or three shell home display areas. There are no public facilities in the area, although the Veteran's Park adjoins it for a distance.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
10



MAP 12

STUDY AREA 10

Area 10 is called the "Country Club Area". It is oriented strongly toward the Town. It is bounded by property lines on the north (except for a stretch between Altavista Subdivision and Greenhills Road, which is an extension of the rear lot lines of lots on the north side of Country Club Road as it curves over to meet Ward's Gap Road), by Ward's Gap Road (a ridge line) on the east, by the present town limits on the south (as well as a line extended from the other side of Lovill's Creek which is part of the eastern boundary of Area 9), and by Lovill's Creek on the west.

With regards to topography, the area is quite irregular. Altavista is on a hill whereas the golf course is fairly flat. The area drains into Lovill's Creek.

There are approximately 233 acres in Area 10. Some 129 (55%) of these acres are developed for urban uses. These figures, of course, include the golf course, making semi-public the outstanding land use. The developed acreage is used thusly:

Semi-Public	43.27%
Residential	38.32
Streets	17.92
Commercial	0.49

Fortunately, there are no industrial uses in this area. Of the 3.17 miles of streets in the area, 2.51 miles (79%) are paved.

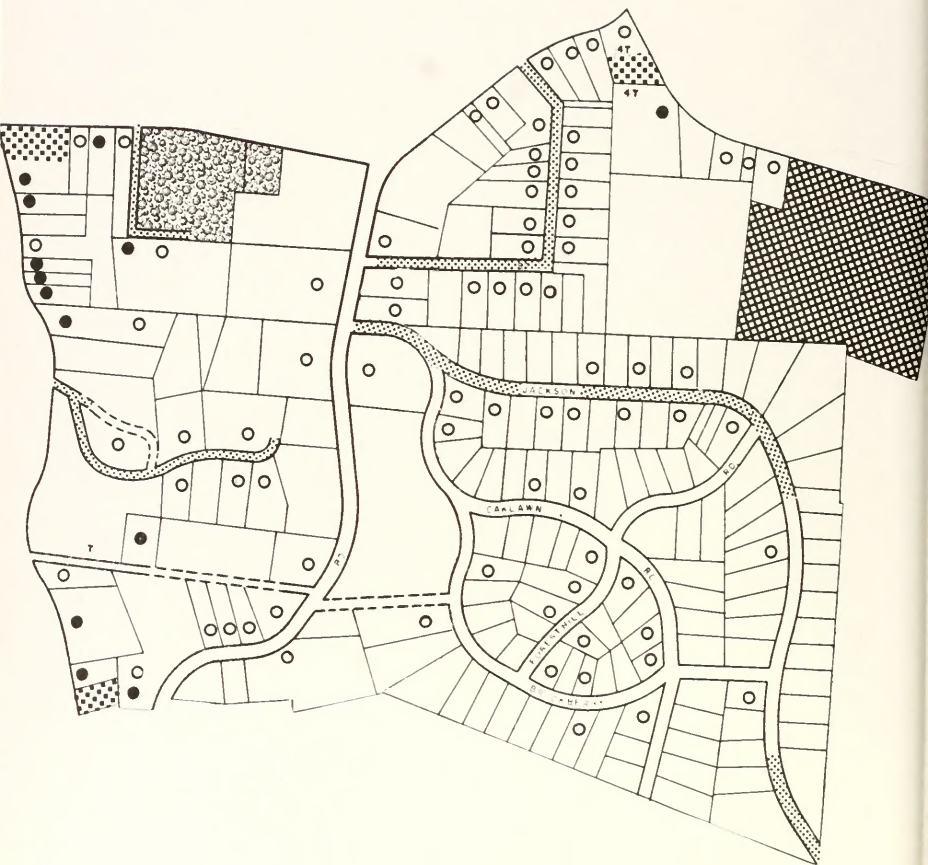
There are 85 dwelling units in the area at present. They represent a population of about 272 persons. It is estimated that 83 additional homes could be built in the area at the prevailing density. This would give the area a "saturation" population of 538 persons. Continued development is likely in this area. Of the 85 dwelling units in the area, only three are substandard. There are 18 dwelling units occupied by Negroes.

There are only two non-residential uses in the area besides the country club. There are a lawn mower and parts shop, and a doctor's office. There will, it is expected, by a new church in the area within a few years.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA

11



MAP 13

STUDY AREA 11

Area 11 has no particular name although it might be called the "Far Northside Area". It includes the Smith Development and a fair-sized Negro neighborhood adjoining the J. J. Jones School. The area is bounded on the north by the road fronting the Jones School, Springs Road and N. C. 1716, on the east by the eastern side of the paper box factory land and Smith Development, on the south by the property line separating Smith Development from the Indian Springs Subdivision and other lot lines extending over to Springs Road (thence through the shallow block between Springs Road and Ward's Gap Road), and on the west by Ward's Gap Road.

The area is quite hilly, especially at its northern end. It is also dissected by a couple of small creeks. The area drains toward the Ararat River.

There are approximately 180 acres in Area 11. Some 90 of these are developed for urban uses. The developed acreage is used thusly:

Residential	48.26%
Streets	38.77
Industrial	12.44
Public and	
Semi-Public	4.12
Commercial	1.41

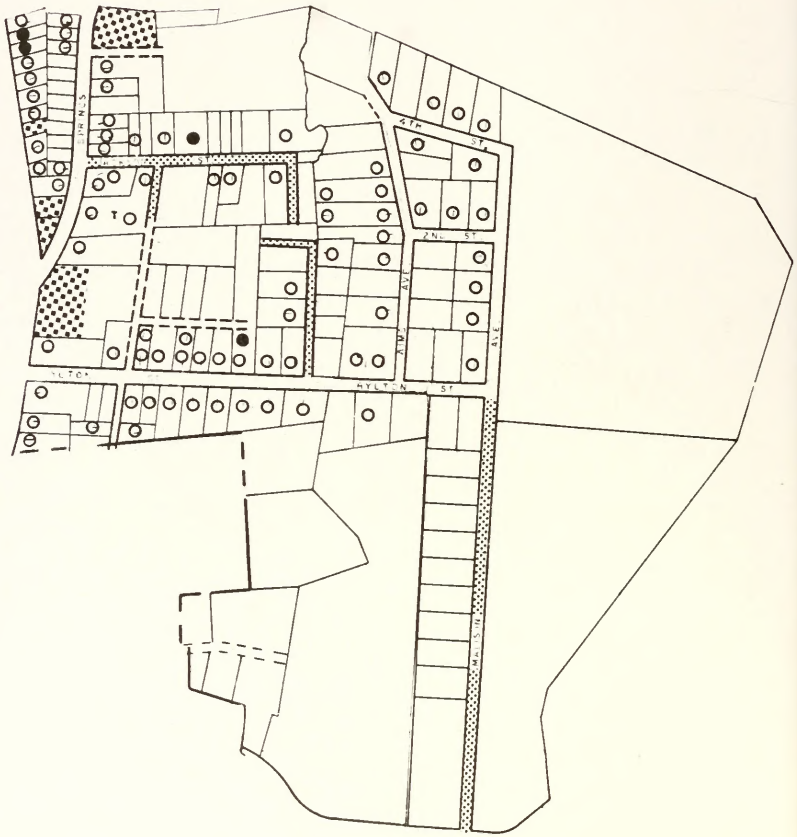
The high percentage of the developed acreage which is occupied by streets is about typical for a half-developed area. Of the 4.14 miles of streets in the area, 3.10 (75%) are paved. However, some of the non-State maintained paving in this area is in very bad condition.

There are 104 dwelling units in Area 11. They represent a population of about 333 persons. It is estimated that 166 new homes could be built in this area. If such development were to materialize, the ultimate population of the area would be approximately 864 persons. Such development is likely since the majority of the area has already been subdivided. Of the 104 dwelling units in the area, 15 (5%) are substandard. Most of these are occupied by the two dozen Negro families who live in the area.

There are seven non-residential uses in the area. They include a paper box factory, an auto body shop, a cafe, two run-down grocery stores, a Negro church and the J. J. Jones School.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
12



MAP 14

STUDY AREA 12

Area 12 includes Indian Springs and the development between there and Ward's Gap Road. It is oriented toward the Town. It is bounded on the north by property lines, on the east by property lines, on the south by Old Springs Road and the present town limits, and on the west by Ward's Gap Road (the ridge line). The area is gently rolling and drains into the Ararat River.

There are approximately 128 acres in Area 12. Only about 44 of these acres (34.5%) have been developed. However, the land is good and is in the path of future high-quality residential growth. The developed acreage is used thusly:

Residential	59.39%
Streets	36.72
Commercial	3.89

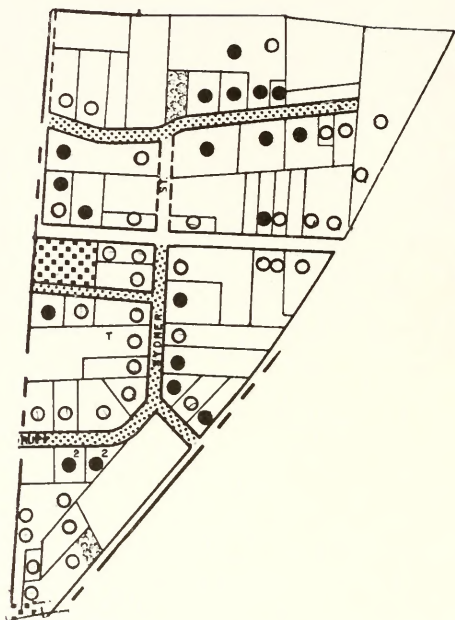
There are no industrial or public uses in the area. Of the 2.24 miles of streets in Area 12, 1.63 miles (75%) are paved.

There are 82 dwelling units in the area at present. They represent a population of about 262 persons. It is estimated that 145 new homes could be built in the area and this type of development is imminent. When fully developed, the area could house about 726 persons. Only two of the 82 houses in the area are substandard.

There are only five non-residential uses in the area, these being an electric contractor's shop, two service stations, a grocery store, and a drive-in cafe. These are all in good repair.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA
13



STUDY AREA 13

Area 13 is called "Nelson Hill". Most of the area occupies a granite outcrop. The area is bounded on the north by lot lines, on the east by Riverside Drive (N. C. 104), on the south by a short stretch of railroad tracks, and on the west by the present town limits. Drainage is toward the Ararat River. This area is oriented toward the Town, sandwiched in as it is between two pieces of town territory.

There are just under 40 acres in Area 13. Almost 28 of these acres (71%) are already developed. Density is quite high considering the terrain. The developed acreage is used thusly:

Residential	61.2%
Streets	34.5
Commercial	3.3
Semi-Public	1.0

Only about one-half (0.61 miles) of the 1.27 miles of streets in the area are paved.

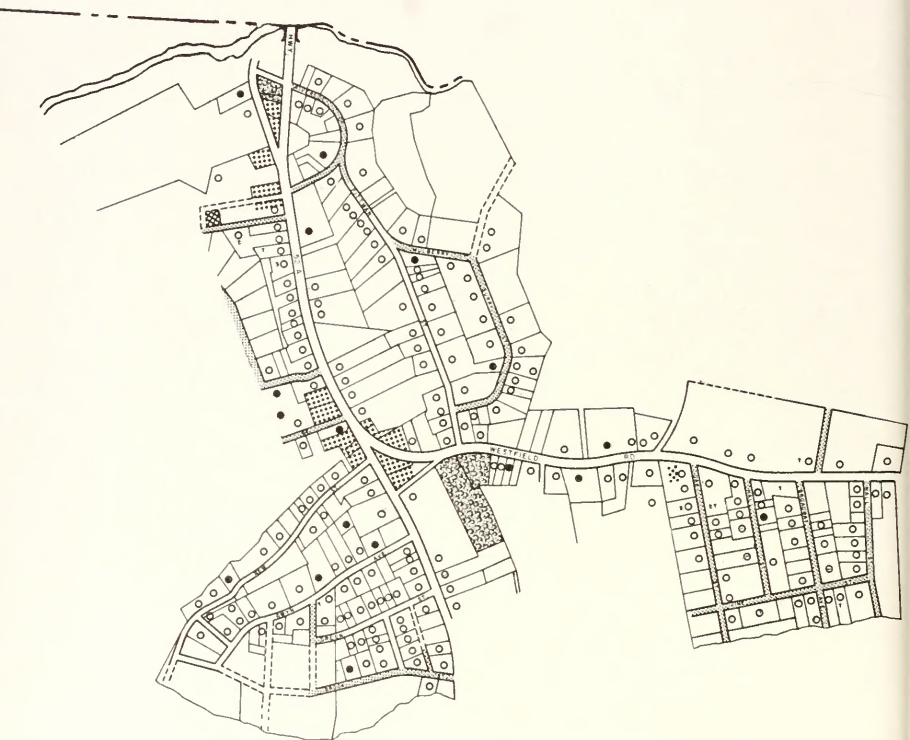
There are 56 dwelling units in Area 13 at present. They represent a population of about 180 persons. It is estimated that six additional homes could be squeezed into the area, but this is unlikely because of the nature of the area. Fully 21 of the 56 homes in the area (37.5%) are substandard. About 18 of the dwelling units are occupied by Negroes.

The non-residential structures in Area 13 are a coal yard, a grocery store and two churches. None of these structures is in prime condition. Further non-residential invasion should be discouraged.

EXISTING LAND USE
AND
HOUSING CONDITIONS

STUDY AREA

14



MAP 16

STUDY AREA 14

Area 14 is called Bannertown. It has a fairly strong community identity. Bannertown is bounded on the north by the present town limits, on the east by property lines (along with a few short connecting lines) and Fairview and Spring Streets, on the south by the rear lot lines of lots facing Vine and Oak Avenues (as well as an unsurveyed line drawn between a point on said rear lot line which is approximately 400 feet south of the centerline of N. C. 89 to another point in the center of the U. S. 52A-Green Street intersection) and from thence south to a creek and along said creek to the tip of the New Street-Gwyn Avenue loop, and on the west by the rear lot lines of lots facing New Street, thence northward in alignment with Fairfax Street as if extended to a point about 1,000 feet south of the Ararat River, thence along property lines to the river and by extension of said property lines to the present town limits.

The area is gently rolling with main highways following ridge lines. The area adjacent to the Ararat River is subject to flooding. Since N. C. 89 follows a ridge line, the area to its north drains into the Ararat River while that located south of it drains into a creek which empties into the Ararat River about where the new Sewage Treatment Plant is located.

There are approximately 260 acres in Area 14. Fully 126 acres (almost one-half) of the area has been developed for other than farming purposes. The developed acreage is used thusly:

Residential	66.87%
Streets	27.39
Commercial	3.51
Public and	
Semi-Public	2.23

Of the 4.74 miles of streets in the area, 3.01 miles (63.5%) are paved. However, some of the paved streets are in poor condition.

There are now 224 dwelling units in the area, including a triplex and seven mobile homes. The estimated population of the study area is about 717 persons. It is further estimated that 128 additional dwelling units could be built in the area. Such development is likely since the area is quite desirable and there is little non-conformity. If the additional homes materialize, the maximum population could exceed 1,100. However, health problems are already in evidence because of privies and septic tanks. Only 15 (6.7%) of the dwelling units in the area are substandard.

There are 24 non-residential uses in the area. The 20 commercial uses are quite well-maintained. They include three service stations, three restaurants, three food markets, three garages, a floor covering store, and a new TV and appliance store. However, there are two vacant business buildings. The public uses include the Bannertown School, a church, a new Bannertown Volunteer Fire Department quarters and a two-story Army Reserve Center.

TABLE III

TOTAL REAL PROPERTY VALUATION AND AVERAGE
RESIDENTIAL VALUATION PER STUDY AREA

<u>AREA</u>	<u>TOTAL REAL PROPERTY VALUATION</u>	<u>AVERAGE RESIDENTIAL VALUATION</u>
1	\$ 522,717	\$ 7,572*
2	419,519	3,104
3	271,375	6,154*
4	729,118	5,237
5	885,542	6,181
6	987,680	4,584
7	235,421	3,034
8	590,457	4,772
9	787,065	5,933
10	1,267,315	10,012
11	1,018,219	6,845
12	959,779	8,915
13	138,535	2,776
14	1,382,927	5,746

*Misleading because of the small number of homes involved.

TABLE IV
CHARACTERISTICS OF THE STUDY AREAS

STUDY AREA	TOTAL ACREAGE	DEVELOPED ACREAGE	FARMED OR UNDEVELOPED ACREAGE	PERCENT OF TOTAL DEVELOPED	RESIDENTIAL COMMERCIAL & RAILROAD			INDUSTRIAL PUBLIC & SEMI-PUB.
					ACREAGE	ACREAGE	ACREAGE	
1	163.02	32.32	130.70	19.82	2.87	22.30	0.75	
2	84.95	51.88	33.07	61.07	30.48	1.73	0.86	
3	66.76	33.07*	33.69*	49.53*	2.58	7.49	2.64	
4	182.82	94.02	88.81	51.42	59.12	15.84*	8.95	
5	124.39	89.75	34.64	72.15	54.19	6.08	2.00	
6	188.04	119.49	68.55	63.54	57.86	17.34	0.92	
7	79.21	35.92	43.29	45.34	10.91	4.31	3.00	
8	100.68	57.28	43.40	56.89	29.79	10.62	55.72	
9	81.50	52.10	29.40	63.92	15.95	22.10	3.67	
10	233.28	128.78	104.50	55.20	49.36	0.63	11.08	
11	179.09	89.09	90.00	49.74	42.99	1.26	0.31	
12	128.17	44.26	83.91	34.53	26.29	1.72	2.81	
13	39.03	27.75	11.28	71.09	17.00	0.92		
14	259.16	125.94	133.22	48.59	84.21	4.42		

* With shopping center, reading across page: 47.72 acres, 19.04 acres, 71.47 percent and 30.49 acres.

Table IV (continued)

CHARACTERISTICS OF THE STUDY AREAS - Continued

STUDY AREA	STREET ACREAGE	TOTAL MILES OF STREETS	MILES OF PAVED STREETS	NO. of DWELLING UNITS	ESTIMATED POPULATION (3.2 persons per DU)	NO. of SUBSTANDARD DWELLINGS	NO. of NON-RESIDENTIAL USES
1	7.15	0.99	0.76	5	16.0	2	2
2	16.74	2.30	0.83	139	444.8	30	11
3	7.16	0.98	0.82	5	16.0	1	14
4	24.45	3.36	2.90	127	406.4	17	11
5	22.65	3.12	1.42	135	432.0	5	30
6	31.67	4.35	3.31	160	512.0	52	35
7	15.02	2.07	1.83	36	115.2	19	9
8	14.80	2.04	1.70	85	272.0	15	17
9	9.15	1.26	0.87	44	140.8	4	20
10	23.07	3.17	2.51	85	272.0	3	4
11	30.09	4.14	3.10	104	332.8	15	7
12	16.25	2.24	1.67	82	262.4	2	5
13	9.22	1.27	0.61	56	179.2	21	4
14	34.50	4.74	3.01	224	716.8	15	24

CHAPTER IV

WHAT IT MEANS TO LIVE INSIDE OR OUTSIDE THE TOWN

One of the most important factors to keep in mind when considering the relative merits of annexation versus the status quo is that of service levels. In other words, the quality of public safety, sanitary, street, and cultural services received by property owners outside the Town may be quite inferior to that received by town-dwellers. Therefore, whatever savings on taxes the outside parties enjoy must be weighed against whatever discomfort, danger and deprivation they must put up with. There is no getting around the stubborn fact that we get out of any situation just about what we put into it. For example, a fringe area house-holder may have a minimum out-of-pocket expense for fire protection, but he may also have a very low quality of fire protection. His fire insurance rates will invariably reflect this lack of protection. He may pay less than the town-dweller for sewerage, but a neighborhood full of privies and over-flowing septic tanks reflects this savings in a very negative way.

It will be the purpose of this chapter to compare the quality and cost of pertinent urban services in the fringe areas of Mt. Airy with the quality and cost of the same services offered within Mt. Airy. The first part of this chapter will treat the matter of quality; the last part will treat the matter of cost - as reflected by its impact on property owners.

LEVEL OF SERVICE COMPARISON

Fire Protection

Mt. Airy

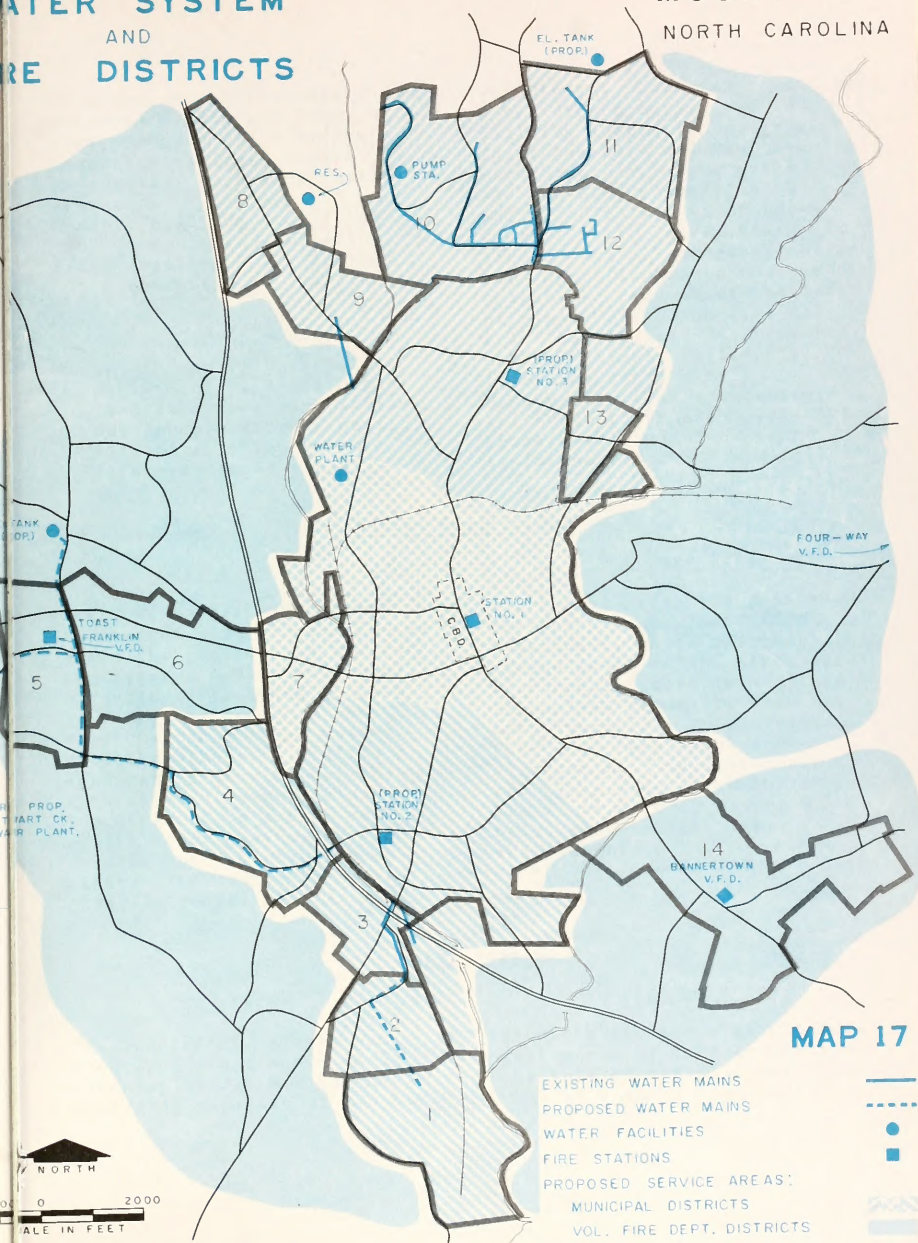
The Town of Mt. Airy Fire Department is staffed with a chief, two assistant chiefs, three full-time firemen, and 22 volunteers. A continuous training program is being carried on - as is a program of building inspection. Mt. Airy's fire station is not well located, but is fairly adequately equipped. Two new stations are planned. Because of the ready availability

Fringe Areas

The fringe areas are served by volunteer fire departments. The Toast-Franklin Volunteer Fire Department, which serves the area lying west of Mt. Airy, has a chief, two assistant chiefs, and 32 volunteer fire fighters. None of these men is a full-timer. The Four Way Volunteer Fire Department, which is located in Flat Rock, serves the area which lies east of town.* It has a compliment of 40

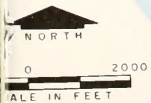
WATER SYSTEM AND FIRE DISTRICTS

MOUNT AIRY
NORTH CAROLINA



MAP 17

- EXISTING WATER MAINS
- PROPOSED WATER MAINS
- WATER FACILITIES
- FIRE STATIONS
- PROPOSED SERVICE AREAS:
- MUNICIPAL DISTRICTS
- VOL. FIRE DEPT. DISTRICTS



of water at a satisfactory pressure within the Town, Mt. Airy enjoys a Class 6 fire insurance rating. Sample residential insurance rates are:

Masonry dwelling	-	.13/\$100
contents	-	.16/\$100
Frame dwelling	-	.21/\$100
contents	-	.24/\$100

*Note - A new volunteer fire department is being organized in Bannertown; it is not known what this unit will have in the way of personnel or equipment.

volunteers. Each department has a training program, but no building inspection program. The Toast-Franklin and Four Way VFD's each have one pumper truck (500 and 700 GPM, respectively) and one 2,000 gallon water tank truck. A \$10 yearly charge is levied upon all property owners, but its collection cannot be enforced. Because of the lack of piped water, the fire district has a Class 9A insurance rating. Sample residential insurance rates are:
Masonry dwelling and contents (with floor furnace)- .32/\$100
Frame dwelling and contents (with floor furnace)- .48/\$100

Police Protection

Mt. Airy

The Town's Police Department is staffed with 18 men and two women (not counting a traffic engineering maintenance man). A continual training program is being carried on. The department has three modern police cruisers, a traffic engineering service car and a three-wheel servicycle. Two cars are on patrol most of the time. Businesses receive special checks each night. The Town also has a juvenile court.

Fringe Areas

The fringe areas are policed by the Surry County Sheriff's Department, which maintains its headquarters in Mt. Airy. About four regular deputies concern themselves primarily with Mt. Airy Township. They provide their own cars, guns and accessories. Juveniles are not given special attention. The State Highway Patrol also helps with traffic law enforcement.

Water Supply

Mt. Airy

The Town of Mt. Airy's water treatment plant has a design capacity of 3.2 MGD and an operating capacity of 2.5 MGD.

Fringe Areas

With the exception of the area just north of Town (comprising the bulk of Areas 10 and 12 as well as a small line to the

The 1960 consumption rate was about 2 MGD. Plans are to build a new water treatment plant on Stewart's Creek, just west of Toast, in fiscal year 1964-65. This new plant will greatly increase the Town's water supply. The relationship of an area's water system to public health and fire protection is extremely close. Citizens of outside areas who covet these advantages should work toward the annexation of their areas. Proposed extensions of water lines are discussed in Chapter VI, along with methods whereby they might be financed.

J. J. Jones School), the fringe areas are dependent completely on private wells. Many of these wells are too close to privies and septic tanks. Water rates in those outlying areas which are served by city water are double those paid by town-dwellers. However, these outsiders with city water are not charged the sewer fee which is figured at 90% of one's water bill and added thereto.

Sewer Service

Mt. Airy

Mt. Airy has a fine sanitary sewerage system which feeds to a new (1960) treatment plant with hydraulic loading capacity of 5.6 MGD. At present, an average of only 1.9 MGD is treated. Thus, there is plenty of room for sewage from the 14 study areas. The new plant is ideally located to serve all of these areas. However, the economic feasibility of extending outfalls and collectors to all of the areas is doubtful. The proposed sewer lines shown on Map 18 are strictly schematic. Improvements serving individual properties would be made upon petition and paid for by special assessments.

Fringe Areas

The suburban areas around Mt. Airy are total unsewered at present. A line is, however, being built to the new industrial park. The granitic soil in the "Hollow" does not absorb wastes as rapidly as would be desirable. Many septic tanks overflow periodically causing not only a stench but a health hazard. In some areas privies are crowded together quite haphazardly.

SEWERAGE SYSTEM

MOUNT AIRY
NORTH CAROLINA



MAP 18

- EXISTING SEWER LINE ———
- PROPOSED SEWER LINE - - - -
- DRAINAGE DIVIDES [shaded area]



Garbage Service

Mt. Airy

Garbage is collected within the town limits every third working day of a five day week in residential areas and every day except Sunday in business areas. The Sanitation Division has a supervisor and 11 full-time men on its staff. Disposal of garbage is by sanitary land fill. No service charge is made for normal garbage service.

Fringe Areas

Garbage is collected in the fringe areas by a private scavenger. Frequency of service is once a week. A monthly charge of \$2.00 is made for this service. This means that fringe dwellers pay \$24 per year that Town dwellers do not pay.

Streets

Mt. Airy

Within the Town of Mt. Airy there are 27.6 miles of streets of which 19.7 miles (72%) are paved. The State maintains 20.4 miles (74% of the total). The Town is prepared to pave a mile of streets per year, but it has not consistently received enough petitions to do this. Paving costs are assessed against abutting property owners - except for that amount of street width which exceeds 36 feet and intersections. There is also some relief for owners of corner lots. Sidewalks are provided along most in-town streets, but these too are financed by special assessments.

Street name signs are provided at each intersection within the Town. The new models are of Scotchlite. Street lights are provided by the Town on

Fringe Areas

Within the 14 study areas there are 36.03 miles of streets, of which 25.34 miles (58%) are paved. Virtually all of the paved roads and the majority of the unpaved ones are maintained by the State. The State does a fairly good job considering the size of its workload, but it cannot be goaded into specific maintenance tasks like a local government can. Those streets which have not been accepted for maintenance on the State system are in very bad condition, e.g., those in the Smith Development. Sidewalks, curbs and gutters are quite rare in all of these suburban areas.

Street name signs in suburban areas are placed by the State Highway Department but they emphasize numbers. Street lights in the fringe areas, where they

all corners - also between intersections when block lengths are excessive. The Town contracts with Duke Power Company for these lights. Lamps of 2,500 lumen power are used in residential areas with 7,000 lumen lamps being used along major streets.

do exist, are financed by a contract between individual property owners and the Duke Power Company. A 2,500 lumen street light costs \$21.60 per year if one has to pay the full bill himself.

Cultural Services

Cultural services (the term includes schools, libraries, and recreation) will not be materially affected whether or not given areas are annexed. However, study areas 1-9 are in the Toast-Franklin School District. Its single school is quite overcrowded. It seems logical that Areas 7-9 be shifted over to the Mt. Airy School District - whether or not they are annexed to the Town. Such a shift would be especially beneficial to junior and senior high school students living in Areas 8 and 9.

It is not felt that the gradual shifting of the proposed annexation areas (i.e., excluding Areas 5 and 6) from the Toast-Franklin to the Mt. Airy School District would cause the latter system any hardship with regard to school bus transportation. Currently, about 50% of the children who attend Mt. Airy District schools are transported by bus. Because of the County's financial responsibility for education, the problem of getting additional buses could be solved without hurting the Mt. Airy District's financial situation.

The Mt. Airy District does have a 15¢ per \$100 supplemental tax, but it would be a pretty parsimonious property owner who objected to this measure to upgrade school facilities.

Recreation is no issue either way. The Town at present has neither public parks nor a public recreation program, but proposals have been made recently which might result in some parks.

THE FINANCIAL IMPACT OF ANNEXATION ON PROPERTY OWNERS

A property owner's first reaction to the idea of annexation is ordinarily the question "How much more will it cost me?" This is a fair question and it calls for a candid answer. The following examples represent a range in property valuation which corresponds roughly with middle class propensities. However, it should be pointed out that the expense to fringe area property owners of private wells and septic tanks has not been figured into these examples.

Let us take a representative house and lot in Toast with a valuation of \$5,000. Its contents are valued at \$1,000 and the owner has an automobile which is valued at \$1,000. The house is a frame structure with an "approved" roof and is heated by a circulating oil heater.

	<u>Outside Town</u>	<u>Inside Town</u>
Total taxes*	\$ 49.77	\$ 103.53
Cost of fire insurance	28.00	12.90
Misc. service charges	34.00	--
Street lights (1/3 lamp)	7.20	--
	<u>\$ 119.77</u>	<u>\$ 116.43</u>

Comment: The owner of this home would save \$3.34 per year through annexation. This may not seem like much, but it does disprove the allegation that one invariably saves money by living outside town.

Another example will be taken - this time from the northside area. Let us take a house and lot valued at \$12,000 with contents valued at \$3,000. The owner also has a car or cars valued at \$3,000. The house is of masonry construction, has an "approved" roof and central heating.

	<u>Outside Town</u>	<u>Inside Town</u>
Total taxes*	\$ 144.18	\$ 282.42
Cost of fire insurance	39.00	20.40
Misc. service charges	34.00	--
Street lights (1/3 lamp)	7.20	--
	<u>\$ 224.38</u>	<u>\$ 302.82</u>

Comment: The owner of this home would pay \$78.44 more per year by living within the Town. This may seem like a lot, but it must be remembered that municipal taxes can be deducted from one's income tax.

*Includes supplementary school tax of 15¢/100 for second example only.

CHAPTER V

COST-REVENUE ANALYSIS

This chapter will set forth what is undoubtedly the most important contribution of this report. It will show, in terms of dollars and cents, which areas can feasibly be annexed, and it will provide a basis for the priority schedule contained in Chapter VI.

First, it is important that the methodology used in deriving revenue and cost figures be explained. This can best be done by treating each category of revenues separately and by treating capital and annual costs of related services together.

REVENUES

The methodology used in deriving the Town of Mt. Airy's likely annual revenues from each of the 14 study areas yielded figures which may, because they are not rounded, seem considerably more accurate than they in fact are. Nevertheless, each figure in Table V is based on the best available information. These figures represent the expected annual revenue multiplied by 20. No estimates were obtained for such things as intangible and franchise taxes, inspection fees, or automobile tags. In most cases, the Town's share from these sources would be very modest. The addition of intangible tax income would probably make the northside areas (10, 11 and 12) look somewhat better, while the addition of franchise tax income would be about proportional to the size of the various areas.

Real Property Tax

The figures used in this report for the real property tax yield are based on a nearly complete sample of all valuations listed in the Tax Office in Dobson. A few cards might have been out of the files on the days that this information was gathered, and a few properties were unvalued, but otherwise all property within each of the 14 study areas is represented. The total valuation for each area was obtained, then multiplied by .6 to give the percentage of valuation which is used for tax purposes in Surry County. The resulting figures were multiplied by \$1.28 per hundred to give the annual tax yield. The estimated valuations of properties owned by Duke Power Company in each study area were added because this information was made available. However, the valuation of other public utilities property was not obtained. The expected yield from Area 1 reflects the addition of

\$500,000 to the current valuation of the area. This \$500,000 represents the reported value of the two factories which are due to be built in Area 1.

Personal Property Tax

From information obtained from the Tax Supervisor of Surry County, it was ascertained that, for the county as a whole, personal property valuations amount to about 30% of real property valuations. Hence, 30% of the real property yield of each area was computed to serve as the personal property yield. The resulting figures may be a little low for highly developed commercial and industrial areas, but should be valid for the rest.

Privilege Licenses

Revenue from privilege licenses was figured from a count of the businesses of various types located in each study area and from the official listing of privilege license fees for the Town of Mt. Airy for fiscal year 1962-63. In a few cases, no applicable fee could be assigned to a given type of business. No attempt was made to estimate the fees chargeable against the stores which might be located in the new shopping center.

A footnote should be added with regard to privilege licenses and that is that they may someday be discontinued except for nuisance control provisions. Furthermore, the State is making a study of the whole system of privilege licenses which may result in radical changes in both State and local fee schedules.

ABC Returns

The only way that reasonable estimates of ABC returns could be computed was by using the average which the Town received per beer and wine license in the latest year that such information was available. There were five beer and wine permits outstanding in Mt. Airy in 1962. They brought in a total of \$8,101. Therefore, the average was \$1,620.20. This average was rounded off at \$1,500 per year for application to the eight fringe area permits.

Powell Bill Funds

Powell Bill funds are paid to a municipality on two different bases. A municipality receives \$1.89 per year per capita. Powell Bill "per capita" revenues were computed on the basis of population estimates derived from dwelling unit counts. Mt. Airy must await another decennial census to get an increase in "per capita" Powell Bill funds. Therefore, the number of years in which the Town would receive additional funds would vary between 12 and 20 -- according to the likely annexation date of each area. This variation is reflected in the estimates in Table V. A municipality also receives \$450 per year for each mile of non-State maintained streets within their corporate limits. An increase in these "per mile" funds should be obtained soon after the annexation of a given area. Therefore, the estimates used in Table V are based on the mileage of existing streets within each area that would probably not be on the State system whenever the area was annexed. These "per mile" figures are all multiplied by 20.

Water and Sewer Charges

Mt. Airy's likely revenue from water and sewer charges collectible in each of the 14 study areas over a twenty-year period was computed from dwelling unit and business counts multiplied against average residential and "intermediate user" water and sewer bills derived from a rate survey conducted by a firm of certified public accountants in 1962. The average residential water and sewer bill was determined to be approximately \$5.00, the average "intermediate user", i.e., business, water and sewer bill \$10.00. These average bills were computed on the basis of the suggested rates outlined in the rate survey (including a sewer charge which is 100% of the water bill) instead of the prevailing rates because it was felt that the Town will eventually adopt these rates in order to break even on its water and sewer operations. The only exception to the \$5.00 and \$10.00 factors mentioned above was made with regard to Area 1 where, it was assumed, the two new textile factories which are due to come into the area will surely be large water users. Hence, charges for this area were based on the assumption that the two plants would use at least 400,000 gallons of water per month between them.

Returns from Property Owners

This category on the balance sheet may be somewhat confusing. However, it simply refers to the money that will be repaid to the Town by property owners who have been assessed for certain improvements if and when said property owners petition for the water, sewer, and street improvements which the Town Engineer expects they will want. The figures listed for each area reflect the estimated cost of assessable improvements plus 6% interest for a ten-year pay-back period. This is in accordance with current Town policy.

COSTS

The cost of supplying urban facilities and services to newly annexed areas falls naturally into capital and annual categories. The capital costs are essentially "one-shot" whereas the annual costs are of a recurring nature. However, both cost categories will be discussed together for a given service. This will give the reader a better opportunity to compare the bases whereon the two types of costs were computed.

All costs were computed solely on the basis of existing development except in the case of Areas 1 and 3. Because each of these areas is predominantly non-residential in character, it was impossible to derive certain costs in the usual way -- from dwelling unit counts. Hence, the two new factories expected in Area 1 and the dozen or so stores expected in the proposed new shopping center in Area 3 were taken into consideration when figuring as many as possible of the capital and annual costs. However, the cost figures for fire and police protection for Areas 1 and 3 are probably too low in comparison with those of the predominantly residential areas. All cost figures in Table V represent a twenty-year period.

Water and Sewer

The capital cost of providing water and sewer service to each of the areas was estimated by the Town Engineer. The Town's portion of the total cost represents the mains that are needed to bring water to the area or to take sewage from the area, oversized mains and those within intersections, and special fixture like fire plugs and manholes. The dependence of one area on another has been taken into consideration. The estimates used are based on rules of thumb. No attempt has been made to supply detailed engineering analysis of line sizes and locations for each area; this would be prohibitively

expensive at this stage. However, detailed engineering studies must be made before any annexations under the provisions of G. S. 160, Article 36, Part 3, can be made.

The operating cost inherent in a municipal water and sewer system serve as an offset against the revenues which a town receives from water and sewer customers. A rough analysis of the balance between water and sewer revenues and costs, with capital improvement needs figured in, is given in the Appendix of this report. Our purpose here will be to explain how the operating costs were figured for each study area.

It was determined from the afore-mentioned rate survey by an accounting firm that it costs \$2.36 per month to produce and distribute the 4,000 gallons of water which has been considered the average domestic requirement. Assuming that sewer service costs the Town an equal amount to provide, the yearly cost of water and sewer service to an average residence would be \$56.64. It was furthermore determined that an average business requires about 8,000 gallons of water per month. It would cost the Town \$3.60 to produce and distribute this water. Assuming an equal cost of sewer service, the yearly cost of water and sewer service to an average business would be \$86.40. These factors were multiplied against dwelling unit and business counts except in the case of Area 1 where the cost of providing the special requirements of the two new industrial plants was computed according to different cost factors.

It should be noted that the abnormally high cost of water and sewer operations in Area 5 is due to the necessity of maintaining a sewage lift station in the area. This lift station would cost the Town \$2,500 per year.

Streets

The capital cost of bringing fringe area streets up to Town standards was estimated by the Town Engineer. Here again, these estimates must be followed up by more detailed estimates before specific annexations can be made. It will be noted that some areas have not been assigned a capital cost, or perhaps only a small one. In these cases, either the bulk of the existing streets is likely to remain on the State system or else it was felt that the property owners would not petition for paving and curbing.

The figures in Table V representing the annual cost of street maintenance for a twenty-year period are based on estimates furnished by the Town Engineer. A portion of the money needed for routine maintenance of streets in annexed areas will surely come from Powell Bill funds. The estimate for annual street expenses includes patching, ditching, weed control, street sweeping, and snow removal, but it does not include the cost of street name signs or street lights.

The cost of street name signs was figured by counting the number of intersections in each area and multiplying by \$18.50 - the cost of the signs presently being used by Mt. Airy. No maintenance or replacement costs were figured because it was felt that these would be minimal.

The cost of street lighting was estimated by one of the Duke Power Company's lighting engineers. The spacing and strength of the lights needed within each study area were determined by recognized engineering standards. The Town makes no capital outlay with regard to street lights.

Fire Protection

The capital cost of a new fire station, fully equipped, was given as \$63,100 in the Public Improvements Program. In order to assign portions of this cost to the various study areas, a determination had to be made as to approximately what areas, both inside and outside the present town limits, would be served by the two new stations which have been included in the afore-mentioned capital improvements budget.

Fire Station #2 is proposed for construction in the vicinity of South and Worth Streets. It is felt that this station can logically serve the area shown on Map 17. There are now 276 dwelling units and 34 non-residential structures lying within proposed annexation areas that could best be served from Station #2. At the same time, there are 620 dwelling units, including the proposed public housing project's 110 units, and 75 non-residential structures lying within the present town limits which could easily be served by Station #2. Accordingly, 30% of the cost of Station #2 was assigned to Areas 1, 2, 3 and 4 while 70% of the cost was assigned to the in-town portion of the service area. Apportionment of capital costs was done on a per dwelling unit basis except in

the case of Areas 1 and 3 where, because of the non-residential character of the areas, each business or industrial use was counted as if it were two dwelling units.

The cost to the Town of purchasing the Toast-Franklin Volunteer Fire Department's building and equipment was placed at \$32,000, this being the reported value of said unit's property at present. This amount was apportioned between Areas 5, 6, and 7 although it should be stated that Area 7, in the event of its annexation, would logically be served from the main (downtown) Mt. Airy Fire Station.

Fire Station #3 is proposed for construction in the vicinity of North Main and Grace Streets. It is felt that this station can logically serve the area shown on Map 17. Included within this fire service district are 456 dwelling units and 54 non-residential structures which lie outside the present town limits as well as about 500 dwelling units and 30 non-residential structures which lie within the present town limits. In other words, 48% of the cost of Station #3 should be borne by Areas 8, 9, 10, 11, 12 and 13 while 52% of the cost should be assigned to the in-town service area. This was done.

Arriving at a capital cost for the new volunteer fire department in Bannertown was a problem. It was assumed that by the time Bannertown became feasible to annex its volunteer fire department would be worth \$50,000. This figure was chosen as a sort of mid-point between the cost of an old volunteer department (Toast-Franklin) and a new urban fire station (Mt. Airy). No determination was made as to the area surrounding Bannertown proper that might be served on a contract basis and thus share the new department's capital costs.

The annual cost of fire protection was computed by simply dividing the total 1962 budget for the fire department (\$29,926) by the 1960 population of the Town (7,055) to yield a per capita cost. The per capita figure was \$4.24. This figure was multiplied by the estimated population of each study area to give annual operating costs which were then multiplied by 20. The method is deficient, however, in Areas 1 and 3 where non-residential uses predominate. The estimates for these areas are therefore understated in comparison with those for the other areas.

Police Protection

The capital cost of police protection is tied in mostly with patrol cars, each of which cost about \$2,500. The present ratio of on-duty police cruisers to population is one cruiser per 3,500 persons. Hence, it was decided that a given study area could be charged with that portion of a cruiser's cost which corresponded to a ratio between the area's population and 3,500. For instance, Area 14's population of 717 amounts to 20.48% of 3,500. It is therefore charged \$512. No replacement costs were figured because police cruisers have considerable trade-in value.

The operating cost of police protection, including traffic control, was derived by a method akin to that used with regard to fire protection annual costs. The combined 1962 budget for policing and traffic control (\$106,654) was divided by the 1960 population of the Town (7,055), the resulting figure being \$15.12 per capita. However, this figure was thought to be inapplicable to the semi-urbanized study areas since it reflects the special needs of the Town's Central Business District. Consequently, the figure of \$10.00 per capita was decided upon. This factor was multiplied by the estimated population of each study area to give the annual cost of policing and traffic control and the result was multiplied by 20.

Garbage Service

Garbage service was another activity which involved capital and annual costs. The cost of a new load packer is reported to be \$10,000. This cost was assigned to the various study areas according to the number of dwelling units in each area. From data collected by the Assistant Town Engineer, it was determined that one load packer could serve about 2,200 homes per three-day cycle or 733 dwelling units per day. To adjust for scatteration, business usage and replacement of equipment, the 733 figure was used instead of the 2,200 figure in computing capital costs by areas.

The annual cost of serving one dwelling unit has been placed at \$10.16. Hence, this figure was multiplied by the number of dwelling units in each area to arrive at the total cost of serving residences in individual areas. The average business in Mt. Airy is reported to cost the Town \$63.25 per year to service. (For purposes of these calculations, industries and institutions were counted as

businesses). The total annual cost of serving dwelling units and other uses was obtained then multiplied by 20 to give the figures found in Table V.

Interest on Bonds

The cost category called "Interest on Bonds" refers to the interest which the Town will have to pay on the total amount of money needed for water, sewer, and street improvements in each area. This interest was figured from a Standard Amortization Table using a ten-year term and 4% interest. It is possible that the bond issue (needed for Areas 11 and 14 might have to run more than ten years, but in order to avoid bias against these large, expensive areas, the ten-year pay-out period has been used for the water, sewer and street bonds needed by them. Furthermore, no attempt was made to decide which, if any, projects would be financed out of Water and Sewer Fund Revenue - although it is probable that some can be so financed.

No interest was computed for the bonds required for Fire Station #2 since the bulk (70%) of its cost is chargeable against the Town rather than the annexable area. It is planned that the other new fire station will be put in without resort to bond financing.

TABLE V
COST REVENUE BALANCE SHEET - Mt. Airy, N. C.

ITEM	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5
REVENUE:					
Real Prop. Tax	\$ 80,750.20	\$ 65,463.40	\$ 42,194.00	\$ 113,273.60	\$ 137,294.00
Personal Prop. Tax	24,086.80	19,331.40	12,505.00	33,597.80	40,805.80
Privilege Licenses	0	1,950.00	6,750.00	2,700.00	6,800.00
ABC Returns	0	0	0	0	0
Powell Bill - Per Capita	0	15,132.06	362.88	15,362.00	16,329.60
Powell Bill - Per Mile	2,070.00	13,770.00	1,440.00	9,900.00	16,290.00
Water & Sewer Charges	39,600.00	186,000.00	39,600.00	171,600.00	222,000.00
Returns from Prop. Owners	0	85,077.00	28,605.60	90,009.00	158,810.40
COSTS:					
Capital -					
Water	70,000.00	25,000.00	24,000.00	25,000.00	42,600.00
Sewer	30,000.00	36,000.00	18,200.00	55,000.00	123,700.00
Streets	0	28,750.00	0	7,000.00	53,600.00
Street Signs	0	185.00	0	222.00	277.50
Fire Protection	472.50	10,943.10	2,362.50	8,870.40	9,430.40
Police Protection	0	317.75	40.00	290.25	308.50
Garbage Service	0	1,896.00	833.00	1,732.00	1,841.00
Annual -					
Water & Sewer	29,856.00	171,283.20	29,856.00	157,689.60	246,128.00
Streets	60,000.00	104,600.00	24,000.00	108,000.00	146,000.00
Street Lights	3,888.00	12,000.00	7,488.00	15,264.00	12,168.00
Fire Protection	1,085.40	37,719.00	1,356.80	34,462.72	36,633.60
Police Protection	2,560.00	88,960.00	3,200.00	81,280.00	86,400.00
Garbage Service	3,342.80	39,627.00	32,641.00	37,188.80	59,040.40
Interest on Bonds	23,300.00	20,271.00	9,832.60	18,640.00	50,397.90
TOTAL REVENUES	\$146,507.00	\$ 386,723.86	\$131,457.48	\$ 436,442.40	\$ 598,329.80
TOTAL COSTS	-224,504.70	-577,552.05	-153,809.90	-550,639.77	-868,539.30
BALANCE	\$-77,997.70	\$-190,828.19	\$-22,352.42	\$-114,197.37	\$-270,209.50

TABLE V (continued)

ITEM	AREA 6	AREA 7	AREA 8	AREA 9	AREA 10
REVENUE:					
Real Prop. Tax	\$ 153,136.00	\$ 36,830.40	\$ 91,489.00	\$122,072.00	\$196,195.60
Personal Prop. Tax	45,512.20	10,848.20	27,208.20	36,268.00	58,397.80
Privilege Licenses	6,650.00	1,450.00	5,100.00	9,200.00	500.00
ABC Returns	35,000.00	0	35,000.00	35,000.00	35,000.00
Powell Bill - Per Capita	19,353.60	4,354.60	7,711.20	3,193.32	7,711.20
Powell Bill - Per Mile	14,040.00	6,840.00	1,800.00	2,880.00	15,770.00
Water & Sewer Charges	264,000.00	64,800.00	142,800.00	100,800.00	111,600.00
Returns from Prop. Owners	205,664.40	39,949.20	93,214.80	60,170.40	70,034.40
COSTS:					
Capital -					
Water	86,400.00	25,200.00	95,600.00	32,000.00	52,625.00
Sewer	93,200.00	15,000.00	57,700.00	31,000.00	73,115.00
Streets	57,000.00	0	800.00	1,200.00	3,000.00
Street Signs	370.00	92.50	37.00	111.00	185.00
Fire Protection	11,177.60	2,515.20	6,180.30	3,200.00	6,180.30
Police Protection	365.50	82.25	194.25	100.50	194.25
Garbage Service	2,182.00	491.00	1,159.00	600.00	1,159.00
Annual -					
Water & Sewer	233,088.00	56,332.80	125,664.00	84,403.20	103,200.00
Streets	154,800.00	88,000.00	88,400.00	58,800.00	148,000.00
Street Lights	27,072.00	6,912.00	11,040.00	8,928.00	14,148.00
Fire Protection	43,417.60	9,769.00	23,065.60	11,939.84	23,065.60
Police Protection	102,400.00	23,040.00	54,400.00	28,160.00	54,400.00
Garbage Service	74,253.80	14,904.40	36,245.40	35,505.40	22,330.40
Interest on Bonds	53,496.80	9,366.60	35,718.90	14,679.00	29,297.42
TOTAL REVENUES	\$ 743,356.20	\$165,072.40	\$ 404,323.20	\$369,583.72	\$495,209.00
TOTAL COSTS	-939,223.30	-251,705.75	-536,204.45	-310,626.54	-530,899.97
BALANCE	\$-195,867.10	\$-86,633.35	\$-131,881.25	\$+58,957.18	\$-35,690.97

TABLE V (continued)

ITEM	AREA 11	AREA 12	AREA 13	AREA 14
REVENUE:				
Real Prop. Tax	\$ 157,934.40	\$148,190.00	\$ 21,586.20	\$ 214,522.00
Personal Prop. Tax	46,919.60	44,226.60	6,383.80	63,725.20
Privilege Licenses	800.00	1,200.00	400.00	3,000.00
ABC Returns	35,000.00	70,000.00	0	35,000.00
Powell Bill - Per Capita	12,579.80	7,439.10	6,773.80	27,095.00
Powell Bill - Per Mile	13,590.00	13,320.00	5,940.00	27,360.00
Water & Sewer Charges	141,600.00	110,400.00	75,600.00	316,800.00
Returns from Prop. Owners	166,824.90	72,747.00	55,978.20	244,873.80
COSTS:				
Capital -				
Water	138,150.00	33,000.00	25,800.00	174,600.00
Sewer	83,400.00	90,000.00	30,000.00	151,000.00
Streets	28,600.00	26,800.00	0	28,600.00
Street Signs	240.50	185.00	129.50	462.50
Fire Protection	7,560.00	5,959.80	4,069.80	50,000.00
Police Protection	237.75	187.50	128.00	512.00
Garbage Service	1,418.00	1,118.00	763.00	3,055.00
Annual -				
Water & Sewer	129,907.20	101,529.60	70,348.80	288,307.20
Streets	186,400.00	101,000.00	65,600.00	166,000.00
Street Lights	14,424.00	7,428.00	4,920.00	25,164.00
Fire Protection	28,221.40	22,251.60	15,179.20	60,784.60
Police Protection	66,560.00	52,480.00	35,840.00	143,360.00
Garbage Service	29,985.80	21,720.80	16,438.60	68,282.40
Interest on Bonds -	57,446.15	34,484.00	13,001.40	81,689.80
TOTAL REVENUES	\$ 575,248.70	\$467,522.70	\$ 172,662.00	\$ 932,376.00
TOTAL COSTS	-772,550.80	-498,144.30	-282,218.30	-1,241,817.50
BALANCE	\$-197,302.10	\$-30,621.60	\$-109,556.30	\$-309,441.50

ANALYSIS

To a large degree, the balances given in Table V speak for themselves. They show quite clearly that certain areas would be prohibitively expensive for the Town to annex. These areas would include, in the order of their costliness, Areas 14, 5, 11, 6 and 2. At the other extreme is the single "plus" area, Area 9, and its moderate deficit companions, Areas 3, 12, 10, 1 and 7. In between these extremes are found Areas 13, 4 and 8 which have fairly sizeable deficits but not of the magnitude of the first-named areas. How should these deficits be interpreted and how should they govern the Town's choice of annexation priorities? First, it should be remembered that the cost of capital improvements is a big factor in these deficits. Second, it should be noted that these areas differ greatly in size, both with regard to acreage and population. For a small, crowded area like Area 13 (with about 180 residents) to show a \$109,556 deficit over a twenty-year period may be worse than for a large area like Area 11 (with about 333 residents and plenty of room for growth) to show a \$197,302 deficit over a like period. Hence, there is a fairly close relationship between area population and the costliness of annexation. On the other hand, most of the areas which give promise of paying their own way are predominantly non-residential areas.

Should a town, then, shy away from the annexation of mainly residential areas on the grounds that they cannot pay their own way as fully or as quickly as other types of areas? The answer to this question is "No", but this answer must be qualified by the statement that it would only be wise for the town to annex first those areas (residential or otherwise) which can be expected to come reasonably close to paying for their own up-grading. Areas whose up-grading will have to be heavily subsidized by the town should be annexed only after the more promising areas have augmented the town's tax base and received appropriate services.

It should be recognized that initially the affected property owners as well as the Town will suffer financial hardships. Therefore, it is no service to the property owners of a declining area to annex them just because they need public works; they may still not be able to afford the special assessments which water, sewer, and street improvements would necessitate. The following table shows the total amount of assessable capital improvements by areas and a rough average assessment based on the number of dwelling units and businesses in each area. (Of course, vacant properties might share some of the load).

TABLE VI

TOTAL AMOUNT OF ASSESSABLE IMPROVEMENTS AND
ROUGH AVERAGE ASSESSMENT PER DEVELOPED PROPERTY

<u>Study Area</u>	<u>Total Amount of Assessable Improvements</u>	<u>Rough Average Assessment per Developed Property</u>
1	\$ 0	\$ 0
2	69,000	460
3	23,200	1,105
4	73,000	530
5	128,800	780
6	166,800	855
7	32,400	720
8	75,600	740
9	48,800	760
10	56,800	640
11	135,300	1,220
12	59,000	680
13	45,400	755
14	198,600	800

Another way to measure the impact of annexation on the Town's finances is to compute the balance between the annual revenues that can reasonably be expected from given areas and the annual operating costs which have been computed for the same areas. These balances are outlined in Table VII. It will be instructive to compare at this point the rank order into which the areas fall according to the twenty-year and annual cost-revenue balances:

20-year: 9, 3, 12, 10, 1, 7, 13, 4, 8, 2, 6, 11, 5, 14

Annual: 12, 9, 10, 1, 3, 8, 11, 14, 7, 4, 13, 6, 5, 2

If an area's rank order is lower in terms of the annual balance than it is (in comparison with other areas) on the twenty-year balance then, obviously, annual costs are a bigger factor in its deficit than capital improvements. An example of such an area would be Area 4 which was the eighth best area in terms of the twenty-year balance but which is the tenth best area in terms of the annual balance. Such annual deficits would, of course, be perpetuated so long as the character of the area, and its degree of development, remained essentially unchanged. On the other hand, Areas 8, 11 and 14 make better showings according to the annual balance than they do on the twenty-year balance which, it must be remembered, includes capital items.

It can be seen from Table VII that Areas 12, 9, 10, 1 and 3 are the only ones that could pay their own way as far as annual expenses are concerned. Of course, Area 3 would show up even better of revenues derived from the proposed shopping center could be added. Area 2 is the worst of all -- in spite of the fact that it is much smaller than, for example, Areas 5 and 6. Areas 7 and 13 also show up quite badly - a reflection of their substandard housing. It can also be seen that there is very little surplus, even in the "plus" areas, that can be applied toward the Town's portion of the cost of capital improvements. Additional development or even redevelopment in certain areas could change this picture.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

It has been the purpose of this report to analyze critically the feasibility and content of a long-range annexation program for Mt. Airy. Various "unmeasurable" motivations for annexation (such as the need for more population) were considered in Chapter I. Chapter II dealt with legal requirements which must be met if annexation is to proceed under the current enabling legislation. Chapter III delimited and analyzed in verbal and statistical terms the various annexation areas. Chapter IV compared the level and quality of services which characterize in-town and out-of-town areas. Chapter V provided a cost-revenue analysis of the 14 study areas -- thus allowing town officials to determine what effect the annexation of given areas will have on the Town's fiscal well-being.

On the basis of the foregoing chapters it is now possible to set forth a priority schedule of proposed annexations, in some detail, for the next ten years and by rank order for the ten years following. These proposals are shown on Map 19.

PRIORITY SCHEDULE

First Stage (1963-1973)

It is the conclusion of this study that the following areas are the only sizeable areas that the Town of Mt. Airy can afford to annex within the coming decade:

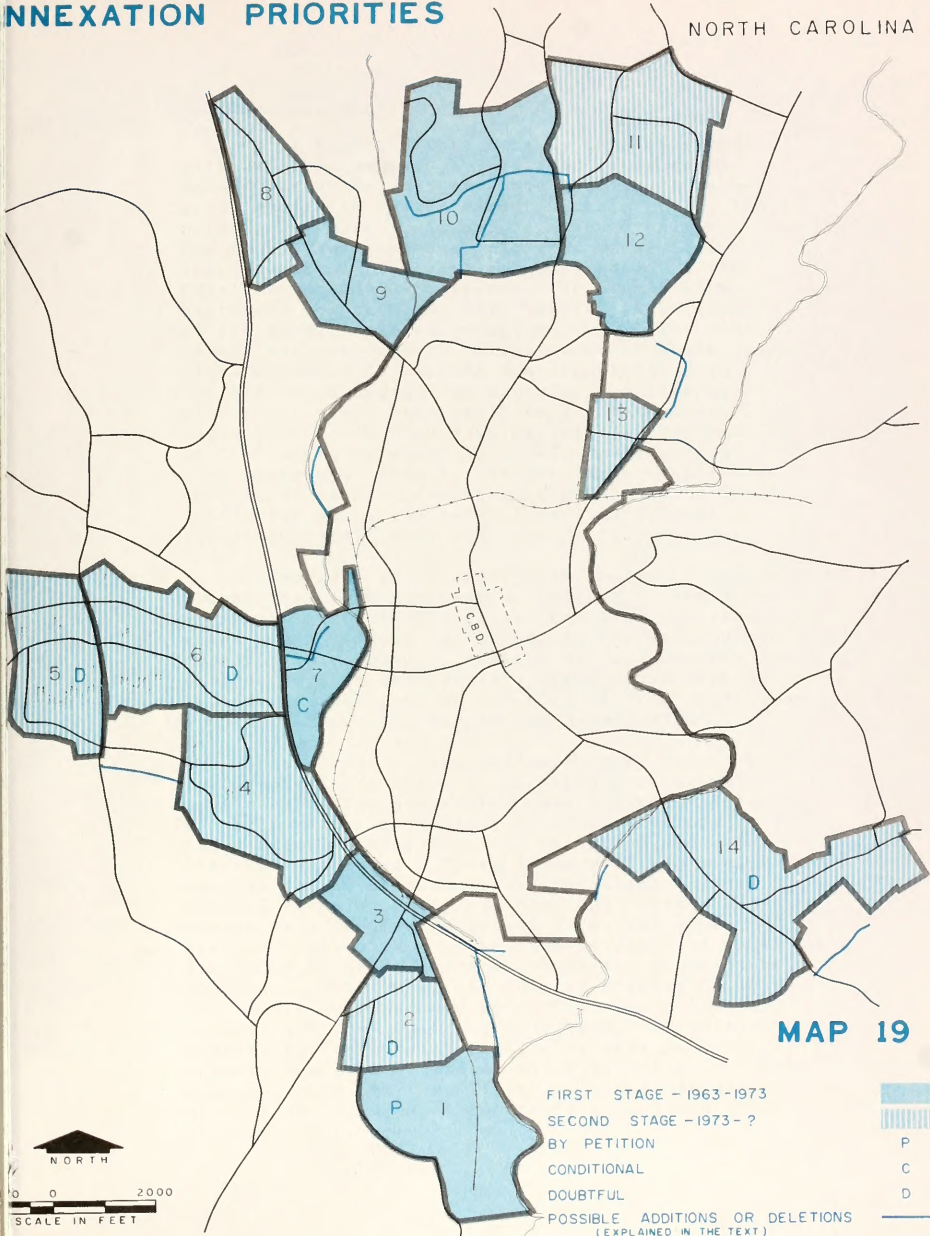
	<u>Approximate Date</u>
(1) Areas 1, 3, and 9	1963-65
(2) Areas 10 and 12	1967-69
(3) Area 7 (conditional)	1971-63

In order to give the reasoning behind the priority schedule set forth above, it will be necessary to discuss each of the aforementioned groups of areas separately. It would be advantageous for the Town to annex areas by groups. This would aid in consolidation of bond issues and would cut down the number of detailed service plans which would have to be prepared. In the discussion which follows, emphasis will be placed on the financing of proposed annexations because this will have a significant affect on their timing, to say nothing of their justification.

ANNEXATION PRIORITIES

MOUNT AIRY

NORTH CAROLINA



Areas 1, 3, and 9

It is expected that Area 1, the industrial park, will be annexed by petition at an early date. Since the area does not qualify for annexation according to the requirements of G. S. 160, Article 36, Part 3, it can be annexed only by petition. Nevertheless, the cost of capital improvements in the area has been added to the total for the 1963-65 period. It is not known precisely how the Town will handle its purchase of the development corporation's water and sewer lines, but the Town is obligated to purchase these lines whenever it annexes the industrial park. One very good reason for annexing the industrial park at an early date would be so that prospective industries could figure on paying city taxes while at the same time enjoying a full complement of city services. Area 1's rather large twenty-year deficit is created mostly by the capital outlay needed for water and sewer lines; additional investment could wipe out this deficit.

A footnote is in order with regard to Area 1's boundaries. The southwestern corner of the study area will undoubtedly be excluded from any annexation since it does not belong to the development corporation. However, a strip of land between the railroad tracks and Lovill's Creek would have to be added to the area in order to make it contiguous with Mt. Airy. See Map 19 for alternatives.

Areas 3 and 9 are similar in many ways. Each is threaded by a major U. S. highway along which many substantial businesses have located. Because of the density and quality of urban development in these areas, a high level of utilities and other services is needed. There is very little vacant land in either area -- except the tract in Area 3 where a shopping center is planned. This shopping center will require municipal water and sewer service. Mt. Airy must be in a position to annex the shopping center site whenever its development commences in earnest. As long as Highway 52 must be crossed by water and sewer lines (and the town limits) the Town might as well annex the adjoining Highway 601 commercial area. The only problem here is the town ordinance which prohibits oil bulk plants within the town limits. This ordinance would have to be repealed before Area 3 could be annexed.

The annexation of Area 3 and 9 would bring into Mt. Airy real property which is listed on the tax rolls at slightly more than one million dollars. However, this is not an all-sufficient grounds for annexation. There are only about 157 persons residing in the two areas (mostly in Area 9) so population accretion would not be significant factor here. There is little prospect of additional residential development in Area 9; and, of course, none in Area 3. Over a twenty-year period, Area 9's excess of revenues over costs will more than make up for Area 3's deficit; and this is to say nothing of the tremendous boost which the proposed shopping center will bring to Area 3's annual revenues.

Mt. Airy has made provision in its recently adopted Public Improvements Program for a bond issue to cover the cost of providing water and sewer service to the shopping center and Highway 601 areas. This bond issue is anticipated within the 1963-65 period. It will amount to some \$42,200. The annexation of Area 9 was not contemplated when the Public Improvements Program was being prepared; therefore, no bond issued were specifically planned for application to this area. However, the \$63,000 needed to make the necessary water and sewer improvements (when added to the \$42,200 mentioned above and the \$100,000 needed for the purchase of the industrial park's lines) would exceed by only \$5,200 the \$200,000 in bonds which the Public Improvements Program estimated could be issued in connection with annexation-related water and sewer projects between 1963 and 1965. The \$205,200 bond issue could be sold without approaching too closely the Town's debt ceiling. Nevertheless, it might be well for the Town to investigate the possibility of paying a portion of the cost of the industrial park's lines out of the Water and Sewer Fund.

Another \$63,100 in bonds would be required in connection with the annexation of Areas 1, 3 and 9 to finance the construction of a new south-side fire station. Fire Station #2 would relieve the present load on Station #1. It would also help the Town hold its Class 6 rating. Failure to build a new station (and thereby add more full-time firemen) would surely boost the Town's rating to Class 7. If, as a consequence of annexation, the citizens of Mt. Airy were obliged to pay higher fire insurance premiums, public support for any future annexations would be nil. The total \$268,300 bond issue which

would be required by Areas 1, 3 and 9 would still be well within the Town's bond limit.

In conclusion, the annexation of Areas 1, 3, and 9 will have a very healthy effect on the Town as well as on the affected areas. It will get the program "off the ground" in areas that can, for the most part, show an excess of revenues over costs over a twenty-year period. While the foregoing optimism is not as justified with regard to Area 1 as it is with regard to Areas 3 and 9, there are extenuating circumstances which make Area 1 seem like a fair risk.

Areas 10 and 12

The annexation of this close-in north-side area would add a fine residential district, which still has great potential for growth, to the Town. The present population of the area is estimated to be 535 persons. Its population when fully developed will undoubtedly be double its present population -- perhaps even 1,200. The area already has municipal water, but it needs sanitary sewers very badly. It needs better fire and police protection and the property owners in the area can afford to pay for these improved facilities and services. The real property valuation of the combined area is \$2,227,094. The twenty-year cost-revenue balance for the combined area is \$66,312.57 -- relatively good considering their semi-developed nature. Both areas show a positive balance of annual revenues against operating costs.

Approximately \$153,105 worth of bonds would be required to make water, sewer and street improvements in Areas 10 and 12. (See Table VIII). This amount is well below the \$326,000 in bonds which the Public Improvements Program anticipated would be needed during the 1966-68 period to bring these north-side areas up to the Town's utility standards. The \$173,000 difference is attributable partly to the fact that the cost of improvements for Area 11 was figured into the \$326,000 estimate and partly because a portion of the cost of water and sewer improvements in Areas 10 and 12 can be obtained from non-bond sources. Table VIII shows that the following sums are missing from the proposed 1967-69 bond issue of \$153,105:

- (1) \$73,115 which is the Town Engineer's latest estimate of the cost of the Country Club - Altavista sewer collector which the Public Improvements Program designates (using a figure of \$71,515) as a Water and Sewer Fund project.
- (2) \$63,100 for the new northside fire station (#3) which, the Public Improvements Program anticipates, can be financed out of the General Fund rather than from the issuance of bonds.
- (3) \$47,520 which, it is assumed, will have been paid back to the Town within a four-year period by property owners in Areas 3 and 9; this represents two-thirds of the amount assessed.

This makes a total of \$183,735 worth of capital improvements (out of the \$336,840 total for the 1967-69 period) which can, if everything goes well, be financed from sources other than bonds. The financing of the Country Club - Altavista sewer collector entirely from the Water and Sewer Fund will, however, become less feasible if a portion of the cost of Area 1's utility lines can be financed out of the Water and Sewer Fund.

A footnote is in order with relation to Area 10's boundaries. An alternative to the annexation of the entire area would be to annex only its eastern and southern half, i.e., omit the Country Club, Altavista, and the area between Altavista and Ward's Gap Road. The main motive for doing this would be to postpone the annexation of this rather sparsely developed area until such time as Area 11 (whose water will have to come from Altavista) is ready for annexation. However, this western and northern segment of Area 10 represents one-half of the total area's valuation while having only 30% of its dwelling units. Since most cost figures are based on dwelling unit counts, it is apparent that the decrease in costs would be much less than that in revenues. Consequently, there is no financial justification for splitting Area 10 for purposes of annexation. There may, however, be good reasons to exclude the Country Club. A further modification of Area 10's boundaries (or perhaps Area 12's) which seems logical would be to include the southwestern corner of Area 11 as shown on Map 19.

Area 7

Area 7 is recommended for annexation with certain reservations. In other words, it is recommended for annexation during the period 1971-73 only if certain things happen. One of these things would be for the area to continue its trend toward business or industrial development. It would be unwise for the Town to annex the area before it becomes apparent what size of utility lines will be needed and what alignments should be followed. Furthermore, Area 7 should not be annexed during the suggested period unless the Town's annexation program has run smoothly up until that time. "Smooth running" involves both financial and political aspects.

Area 7 logically should be a part of Mt. Airy since it occupies a strategic location near one of the Town's main entrances. The annexation of Area 7 would smooth out the town's western boundary. However, it should be noted on Map 19 that a portion of the area could be deleted without hurting the plan. It is assumed that the industrial area which lies on the town side of Lovill's Creek just north of Area 7 will also be annexed long before Area 7 is.

The total assessed real property valuation of the area is only \$235,421, but additional business or industrial development could change this figure greatly. Only \$40,200 worth of bonds would be required by this area.

PROBABLE NET EFFECT OF THE FIRST-STAGE ANNEXATIONS ON THE TOWN

If Mt. Airy were to annex Areas 1, 3, 7, 9, 10 and 12 by 1973, it would receive at least 820 new citizens of whom approximately 700 would be within the Town by the time the 1970 Federal Census is taken. Continued residential development in the six areas, especially Areas 10 and 12, could perhaps boost the aggregate population figure up to 1,000 by 1973 - if not by 1970.

The twenty-year and annual cost-revenue balances for a composite of the six First-Stage areas are as follows:

Twenty Year

Revenues	\$ 1,775,352.30	
Total Costs	<u>-1,969,691.16</u>	
	<u>\$ -194,388.86</u>	= \$9,716.94 per year deficit (counting capital items)

Annual

Revenues	\$ 75,192.27	
Op. Costs	<u>-65,874.61</u>	
	\$ +10,317.66	= annual surplus (not counting capital items)

This deficit of \$9,717 per year does not seem to be excessive. The six areas, taken together, can at least contribute \$10,318 per year toward the Town's share of the cost of capital improvements.

In addition to the two new fire stations previously discussed, it is likely that an additional police car and certain that another garbage truck will be needed whenever Areas 1, 3, 7, 9, 10 and 12 have all been annexed.

PRIORITY SCHEDULE

Second Stage (1973-1983)

Although it is impossible to assign even approximate dates to the remaining eight study areas, it is conceivable that four of them could be annexed within the period 1973-83. These four areas have been grouped according to criteria which seem valid from a 1963 vantage point but which might not seem very logical when the proposed re-study is made. Therefore, the following priorities (though based on Chapter V's analyses) should be considered highly tentative:

- (1) Areas 4 and 8
- (2) Areas 11 and 13
- (3) Areas 2, 5, 6, and 14 (doubtful)

Of the above-named areas, the most promising one seems to be Area 4 -- followed closely by Area 8. Area 11 has plenty of room for additional development - which development could mitigate its highly deficit nature by 1980.

Area 13 should be annexed someday, if only because it will eventually be surrounded by the Town. Area 2 may never be feasible to annex, but the Town may feel a moral obligation to do so anyway. Area 6 does not have too unfavorable a twenty-year balance, but its virtual inseparability from Area 5 would probably prevent its annexation. Although Areas 5, 6, and 14 may not soon be feasible to annex, they should be re-studied along with the others which have not been annexed by 1973.

It is also imperative that Mt. Airy's Public Improvements Program be revised and at least a year added each year. Without such a guide it will be impossible to say whether the Second Stage of the annexation program will be within the Town's financial capacity.

Areas 4 and 8

These two areas have certain features in common. Both are bordered by the Highway 52 Bypass. Both have fairly good quality homes. The total real property valuation of Areas 4 and 8 is \$1,319,573. Their twenty-year cost-revenue deficits are of similar magnitudes, although Area 8's annual balance is more favorable. Areas 4 and 8 are not prime annexation possibilities, but they are much better than any of the other remaining areas. They would also yield a population of at least 700.

The desirability of Area 4 for annexation depends on the construction of the new water line from the proposed Stewart's Creek Water Plant. If the line comes down Blument and Caudle Roads as it is planned, the land on both sides of these roads will surely develop residentially. The area could easily become oriented toward Mt. Airy rather than Toast - at least as far as utilities are concerned. About \$80,000 worth of bonds, not counting those required for the new Stewart's Creek Water Plant, will be needed when this area is annexed.

The trend in recent development in Area 8 seems to be in the direction of commercial rather than residential construction so it is unlikely that the area's population (which is now about 272) will ever exceed 350. However, the annexation of this area would serve as a bridge toward the Town Woods Development which Mt. Airy might, in the far distant future, wish to annex. Then, of course, the high quality commercial establishments which are going into the area need urban-type services. Hence, in spite of the relatively heavy cost of capital improvements in this area (\$153,300 for water and sewer facilities) this area should be seriously considered for annexation during the mid-1970's.

Areas 11 and 13

Areas 11 and 13 have little in common besides the fact that they are on the same side of Mt. Airy. For this reason, and others pertaining to the relative size and costliness of the areas, it is recommended that Areas 11 and 13 be annexed together.

Area 11 should eventually be annexed because it is in the path of additional high quality residential development which will require a high level of urban services. The assessed valuation of the area is already \$1,018,219 and additional development is likely to close the gap between revenues and costs to a satisfactory degree before 1980. Property owners in the area will, for the most part, be able to afford the assessments that will be necessary to improve their properties. Area 11 will require about \$221,500 worth of water and sewer bonds and \$25,000 worth of street improvements bonds.

Area 13 eventually should be annexed because, as already pointed out, it is destined to become virtually surrounded by Mt. Airy. This circumstance will become a reality if and when the school site and the land lying between said site, the present town limits and Areas 12 and 13 are annexed. This could probably be done by petition, and it certainly should be done for the sake of the school. Area 13 could then be served in some ways almost as easily as it could be skirted. However, the area's low assessed valuation (\$138,535) and its large population will make it quite burdensome to the Town. About \$55,800 worth of bonds would be required to bring water and sewer service into the area. It will take some real selling to make the area's

property owners willing to pay the special assessments which water and sewer improvements will necessitate. However, a "hole" in the Town is unthinkable.

Areas 2, 5, 6 and 14

Areas 2, 5, 6, and 14 are extremely doubtful annexation possibilities. At least, this is the way they look from a 1963 vantage point. The discussion which follows may sound overly pessimistic. If so, it is because these four areas would be a tremendous burden to the Town if they were annexed any time soon. However, conditions might change in such a way as to favor the annexation of these areas at some future date.

Mt. Airy might be inclined someday to annex Area 2 for the simple reason that its own territory will practically surround Area 2. Another altruistic motive might be to alleviate the health hazards which exist in the area. A more practical reason to annex the area would be to redevelop it for industrial use. This is a very long-range possibility and would be feasible only if and when the adjoining Industrial Park fills up completely. One fact should always be kept in mind when the annexation of Area 2 is considered -- Area 2 is the worst of the 14 study areas in terms of its annual cost-revenue balance. Its expected annual revenues will not come within \$7,500 of covering its annual expenses. This is to say nothing about the cost of capital improvements which, in the case of Area 2, is unduly modest because of the fact that Area 1's water and sewer lines cross the area. Because the Town would already have said mains in the area, \$69,000 of the total \$87,000 needed for other water, sewer, and street improvements in Area 2, \$69,000 would have to be assessed. Since the real property valuation of the area is only \$419,519, it is possible that these improvements would not be petitioned for in spite of the great need which exists for them. Then too, further infiltration of commercial uses will decrease not only the desirability of the area for homes but will decrease the population living therein. Hence, the area cannot be attractive primarily as a census-raiser.

There are many factors which militate against the annexation of Areas 5, 6, and 14. In the first place, both Toast - Franklin and Bannertown have a certain community identity and cohesiveness. Toast-Franklin has a Volunteer Fire Department and Bannertown is organizing one. The problems involved in taking over these facilities are legion. The cost of providing water, sewers, and paved streets to these communities would be tremendous. This is reflected in the large twenty-year deficits which these areas would create. The cost of providing other services would also be great, although Area 14's annual deficit is surprisingly low. In short, Areas 5, 6, and 14 could profit by having a higher standard of sanitation and protection by annexing to Mt. Airy, but the Town cannot within the foreseeable future afford to assume the full responsibility for bringing about these desirable conditions. Perhaps some type of partnership can be worked out whereby the Town supplies water to the residents of Toast-Franklin. Such an arrangement would be contingent on the building of the Stewart's Creek Water Plant. Another solution which Toast-Franklin as well as Bannertown might consider would be to establish sanitary districts. Various improvements could then be installed and operated with monies derived from special assessments and service charges.

A footnote is in order with relation to the boundaries of Areas 5, 6, and 14. First, with regard to Areas 5 and 6, there is a piece of land which lies between Areas 5, 6, and 4 which might well be included with one or another of the areas whenever the proposed water main has been constructed along Franklin and Bluemont Roads. Second, Map 19 shows a tract between Area 14 and the present town limits which probably should be annexed if and when Area 14 is annexed. Third, the large open field between Seed Cane Creek and the Bannertown School should also be included since it is ripe for development. Fourth, the new Fairview Subdivision should also be included if Bannertown is annexed.

CONCLUSION

Since the most critical aspect of any civic undertaking is usually the incorporation of its costs into the municipality's budget, the following schedule of needed bond issued is offered as a guide to the timing and bonding of capital improvements in the six areas which certainly should be annexed by 1973. A word of explanation should, however, be given here with regard to the revolving principle used in the following schedule. It is assumed that bonds will be sold for specific projects but that all returns from property owners will go into a surplus fund which can be drawn upon to decrease the size of subsequent bond issues. It is manifest that the bonds cannot be retired with any portion of the property owners' returns. If this were done there would be no surplus fund and no "revolution" of monies.

It is the conclusion of this study that Mt. Airy can push forward with an ambitious annexation and public improvements program without jeopardizing its fiscal well-being.

TABLE VIII

SUMMARY OF NEEDED BOND ISSUES

<u>Area</u>	<u>1963-65 Projects</u>	<u>Estimated Cost</u>	<u>Town's Share</u>	<u>Property Owners' Share</u>
1	Water	\$ 70,000	\$ 70,000	\$
	Sewer	30,000	30,000	
3	Water	24,000	12,000	12,000
	Sewer	18,200	7,000	11,200
9	Water	32,000	6,400	25,600
	Sewer	31,000	7,800	23,200
misc.	Fire Station #2	63,100	63,100	
	Total	<u>\$268,300</u>	<u>\$196,300</u>	<u>\$ 72,000</u>
	Proposed Bond Issue	<u>\$268,300</u>		<u>x.66</u> <u>\$ 47,520 (rev.)*</u>
<u>1967-69 Projects</u>				
10	Water	\$ 52,625	\$ 46,625	\$ 6,000
	Sewer	73,115 (WSFR)*	22,315	50,800
12	Water	33,000	27,000	6,000
	Sewer	90,000	62,000	28,000
	Streets	25,000		25,000
misc.	Fire Station #3	63,100 (GF)*	63,100	
	Total	<u>\$336,840</u>	<u>\$221,040</u>	<u>\$115,800</u>
		<u>-136,215 (WSFR & GF)</u>		<u>x.33</u>
		<u>\$200,625</u>		<u>\$ 38,214 (rev.)</u>
		<u>-47,520 (rev.)</u>		
	Proposed Bond Issue	<u>\$153,105</u>		
<u>1971-73 Project (?)</u>				
7	Water	\$ 25,200	\$ 7,800	\$ 17,400
	Sewer	15,000		15,000
	Total	<u>\$ 40,200</u>	<u>\$ 7,800</u>	<u>\$ 32,400</u>
		<u>-38,214 (rev.)</u>		
	Proposed Bond Issue	(none, if all is going well) (<u>\$2,000 from GF</u>)		






*Abbreviations mean "revolved", "Water and Sewer Fund Revenue" and "General Fund".

Balance of Bonds

Total cost of major capital improvements	\$645,340	Total bonding which can be borne (Public Improvements Program, page 51)	\$621,100
Total financed from WSFR, GF, and assessment returns	<u>-223,935</u>	Total bonding recommended	<u>-421,405</u>
Total bonds needed	<u>\$421,405</u>	Safety Factor	<u>\$199,695</u>

**EXISTING LAND USE
AND
HOUSING CONDITIONS**

LAND USE

SINGLE FAMILY RESIDENTIAL	0
MULTI FAMILY RESIDENTIAL	0 ²
TRAILER	T
INDUSTRIAL	
COMMERCIAL	
PUBLIC & SEMI-PUBLIC	
VACANT LAND	
UNPAVED ROADS	

HOUSING CONDITIONS

STANDARD	0
SUB-STANDARD	●

APPENDIX B

BALANCE BETWEEN WATER AND SEWER REVENUES AND COSTS

20-YEAR BALANCE (Including Capital Items)

Study Area	20-Year W & S Charges	Returns from Property Owners	Total Revenue	Value of W & S Improvements	20-Year W & S Operating Costs	Interest on W & S Bonds	Total Costs	20-Year Balance
1	\$ 39,600	\$ 0	\$ 39,600	\$100,000	\$ 29,856	\$23,300	\$153,156	\$-113,556
2	186,000	53,019	239,019	61,000	171,283	14,213	246,496	- 7,477
3	39,600	28,606	68,206	42,200	29,856	9,833	81,889	- 13,683
4	171,600	90,009	261,609	80,000	157,690	18,640	256,330	5,279
5	222,000	97,160	319,160	166,300	246,128	38,748	451,176	-132,016
6	264,000	144,014	408,014	179,600	233,088	41,847	454,535	- 46,521
7	64,800	39,949	104,749	40,200	56,333	9,367	105,900	- 1,151
8	142,800	93,215	236,015	153,300	125,664	35,719	314,683	- 78,668
9	100,800	60,170	160,970	63,000	84,403	14,679	162,082	1,112
10	111,600	70,034	181,634	125,740	103,200	29,297	258,237	- 76,603
11	141,600	136,000	277,600	221,550	129,907	51,621	403,078	-125,478
12	110,400	41,922	152,322	123,000	101,530	28,659	253,189	-100,867
13	75,600	55,978	131,578	55,800	70,349	13,001	139,150	- 7,572
14	316,800	214,049	530,849	325,600	288,307	75,865	689,772	-158,923

ANNUAL BALANCE (Excluding Capital Items)

Study Area	\$	Study Area	\$
1	812	8	\$1,428
2	1,226	9	1,366
3	812	10	700
4	1,150	11	974
5	-2,011	12	739
6	2,576	13	438
7	706	14	2,374

PREPARED FOR:

TOWN OF MT. AIRY, NORTH CAROLINA

Edward T. Clark, Mayor

F. G. Doggett, City Manager

TOWN BOARD OF COMMISSIONERS

W. I. Monday
W. M. Beamer
A. B. Withers
W. F. Harris
C. Lowry

PLANNING BOARD

H. O. Woltz, Chairman
A. B. Carter
H. B. Rowe
J. P. Johnson
N. C. Hatcher
G. C. Wright
R. J. Lovill, Jr.
B. R. George
C. M. Hoover

TECHNICAL ASSISTANCE FROM:

STATE OF NORTH CAROLINA
DEPARTMENT OF CONSERVATION AND DEVELOPMENT
DIVISION OF COMMUNITY PLANNING

George J. Monaghan, Administrator

WESTERN PIEDMONT PLANNING OFFICE

Edward D. Baker, Chief Area Planner
*Charles L. Sellers, Community Planner II
John W. Lamb, Draftsman I
M. Eileen Antosek, Secretary

*Responsible for project

June, 1963 - Price: \$1.50

STATE LIBRARY OF NORTH CAROLINA



3 3091 00747 7789

